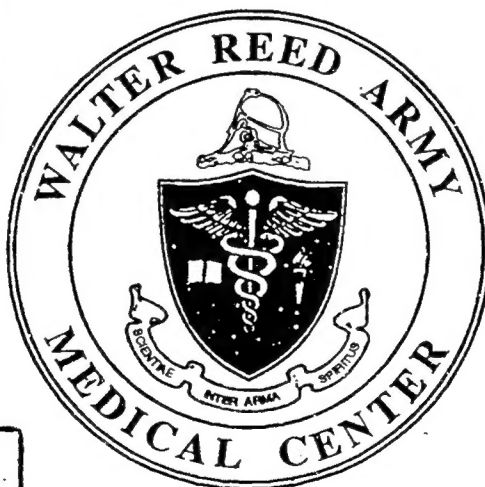
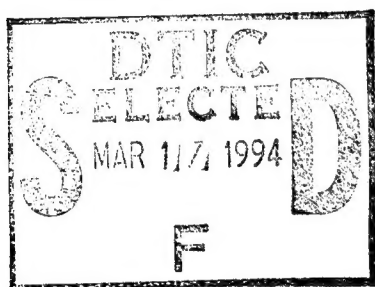


1993 AMEDD
CLINICAL PSYCHOLOGY SHORT COURSE

24 - 28 May 1993

WALTER REED ARMY MEDICAL CENTER
WASHINGTON, D.C.



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AMEDD CLINICAL PSYCHOLOGY SHORT COURSE

24 - 28 May 1993

WALTER REED ARMY MEDICAL CENTER

SPONSORED BY THE OFFICE OF THE SURGEON GENERAL
UNITED STATES ARMY

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PROGRAM

24 May 1993
0800-0830 Registration
0930-0945 Welcome MAJ Bruce Crow (WRAMC)
0945-1000 Opening Remarks MG Ronald R. Blanck (WRAMC)
1000-1600 Workshop Brief Therapy
Dr. Jay Haley (Family Therapy Institute)

25 May 1993
0930-1600 Workshops
Mild head injury: Does anyone really suffer?
Dr. Jeffrey T. Barth (Univ Virginia Medical School, Charlottesville)
Effective brief therapy
Dr. Richard Fitzpatrick (Innovative Training Seminars)
1130-1300 luncheon Health Care Reform: Salvation or Armageddon
Dr. Bryant Welch (American Psychological Association)

26 May 1993
0800-0850 Consultant update: COL Gregory Laskow (WRAMC)
0900-1000 Automated neuropsychological assessment
Dr. Jack Spector (WRAMC)
CDR Dennis Reeves (Bethesda Naval Hospital)
1015-1145 Neurobehavioral aspects of HIV disease and AIDS
Dr. Robert L. Mapou (Henry M. Jackson Foundation)

27 May 1993
0830-1600 Personality Assessment Inventory (PAI)
Dr. Leslie Morey (Vanderbilt University)
1040-1130 Current Issues
Dr. Patrick H. DeLeon (U.S. Senate staff)

28 May 1993
0830-0930 National Health Reform: The Future is Now
Dr. Robert Resnick (Medical College of Virginia, Richmond)
0930-1000 Career Activities Update
LTC Michael Hicks (OTSG)
1000-1030 Practical issues in managed health care
Dr. Terrence Fullerton (American Psych Management)

Poster Session:

"Forensic psychology applications of military mental health law to a case of child sexual abuse"
LTC Edward O. Crandell

"An updated psychologist field chest: From antiquated to sophisticated"
CPT Michael A. Kwitkowski 528th Medical Detachment
(Combat Stress) Fort Bragg, North Carolina

"Use of an innovative technique to decrease anxiety and distress in traumatized children: Song-writing as a therapeutic strategy"
MAJ Kathleen S. Mayers Western State Hospital
Tacoma, Washington

"When attorneys contribute to emotional and behavioral problems in their mentally ill clients: The drawbacks of incorporating socialization in a professional relationship"
MAJ Kathleen S. Mayers Western State Hospital
Tacoma, Washington

"Division of Behavioral Science: Together yet separate: A new organizational structure of mental health resources for a new age"
COL Anthony C. Zold Madigan AMC, Tacoma, Washington

"Patient satisfaction in Army medical facilities"
LTC A. David Mangelsdorff, HQ Health Services Command,
Fort Sam Houston, Texas

"U.S. Army Aeromedical Psychology Training course"
CPT Stephen V. Bowles, School of Aviation Medicine, Fort Rucker,
Alabama

AMEDD PSYCHOLOGY'S C4:
CHALLENGE, COMMITMENT, CONSERVATION, CHANGE.
THE LAST FOUR YEARS AND CONTINUING

Gregory Laskow, Ph.D.
Clinical Psychology Consultant
to the U.S. Army Surgeon General
Walter Reed Army Medical Center
Washington, D.C.

As the outgoing consultant in clinical psychology for the Army Surgeon General, the author provides a summary of the recent peacetime and wartime health care and training initiatives and preliminary results of the same by U.S. Army Psychology during the period 1989-1993. Over the past several years, Department of Defense Psychology has played a major role in shaping many changes within the profession itself. A review of these provides the reader with an appreciation for the mechanics of mental health care initiatives developed within the military and how these positively effect similar application(s) in the civilian sector. An analysis is conducted to portray a perspective of the requirements facing U.S. Army Psychology as it responds to Congressionally mandated downsizing along with the simultaneous demands of DoD and Governmental health care reform initiatives. Similarly, recent changes in revised wartime requirements for deployment, structure, function and equipment supporting the clinical psychologist and the overall mental health care mission are covered. Lastly, vast changes are taking place in throughout the health care industry and many other radical cost control measures are forthcoming. Uniformed psychologists need to be able to appreciate the influence of DoD and Congress on our own health care policy changes, especially within the mental health spectrum.

On behalf of the U. S. Army Surgeon General, Lieutenant General LaNoue, I want to welcome you to the 1993 AMEDD Psychology Short Course. I am sure you will find the proceedings appreciative and sensitive to the massive changes taking place within the mental health care marketplace today as well as an update of clinical and training events and issues unique to some of our clinical subspecialties within the Army of the 1990's.

I am pleased to have this opportunity to provide you a state-of-the-subspecialty of Army Clinical Psychology at the 1993 AMEDD Clinical Psychology Short Course. Throughout my presentation, I will occasionally review where we started about four years ago as well as provide a description of the status of

our operation as we know it today. From a composite of these, I hope to afford both short-range and strategic reliable forecast. Additionally, one desirable objective that we might adopt is to partial-out, identify and label some of the calm in all of this chaos in order that a sensible and realistically accurate picture is portrayed for you.

As most of you are aware, there shortly will be a change in the stewardship of U.S. Army Clinical Psychology, namely the consultant's position. This presentation therefore will, I hope, provide you a summary of those things that we have accomplished in our recent past as well as a hopefully not too ominous crystal ball gazing of things to come for the new consultant.

Our field of U.S. Army Clinical Psychology, with all of its subspecialties of Child and Pediatric Psychology, Clinical Neuropsychology, Health Psychology, Special Forces Psychology, Aeromedical Psychology, to mention a few, are firmly immersed in many mind-boggling, and sometimes stormy, worrisome episodes of change in health care policy and resourcing. It is truly amazing, when one considers in spite of all of the factors and influences that are directing this flux, that the health care we provide continues to be as effective and efficient as it is in our respective delivery systems. Certainly, we are no less exposed to these issues vis-a-vis our civilian brethren as they also are aggressively facing them.

Several of the changes and influences originate from within our very own structure and philosophy of military health care delivery. Others, are generated in response to or in anticipation of the proposed nation-wide health care reform initiatives for all Americans. Whether it is a policy shift or restructuring mandate from The Surgeon General of the Army for a leaner and more efficient agency, a DoD initiative advocating for admission privileges for clinical psychologists across all of DoD, the Hillary Rodman Commission on Health Care Reform (DoD Health Affairs was on the committee), or our professional association's realignment of key personnel to maximize influence on health care reform policy, these and, as I suspect, several others yet to unfold, will have significant influence on all that we do in training, clinical practice and research.

There is not a single level of our health care delivery systems that we can ignore in this respect. There is not a single one among us that cannot be proactive, participatory and critically skeptical and cautious in shaping the health care policy at our installations. We cannot afford to remain passively aloof and rely on the defined models to blindly design and shape health care delivery protocols. Your opinion from the operational levels is essential for maintenance of sensibility, practicality and quality in the applications and modifications of all health care policy generated and promulgated.

The **Challenge** is obvious:

- a. maintain current level of quality and quantity in mental health care delivery systems;
- b. recapture "unnecessary" CHAMPUS costs;
- c. establish the **Commitment** to maintain what is known to be good mental health using primary, secondary and tertiary care interventions;
- d. focus upon **Conservation** and efficiency as critical to contain mental health care costs;
- e. expect the inevitability of **Change** along with radical newer health care policies and resourcing.

WHERE WE'VE BEEN AND WHAT WE'VE DONE

With this prologue, I wish to proceed with a brief summary of initiatives, accomplishments and lessons-learned occurring in our recent corporate past. With your indulgence, and for the sake of brevity, I'll provide these in an outline format and will entertain any requests for elaboration:

1. There has been **Increased Promotion Opportunities** through Colonel:

a. As an illustration, in FY '89, the number of O-6 authorized slots was zero; in FY '93, the number was increased to four. Other plans call for more slots to be allocated in the near future.

b. The current promotion picture has also improved. The following table provides a summary of the Selection Opportunity Rate (SOR) across grades during the period of 1987-1992:

		MAJ	LTC	COL
c.	1987 SOR =	27	50	100
	1988 SOR =	100	100	0
	1989 SOR =	100	100	100
	1990 SOR =	29	50	50
	1991 SOR =	90	60	50
	1992 SOR =	70	75	100

(SOR = AZ Selects + PZ Selects / PZ Eligible)

d. The Branch Immaterial Slots have similarly increased across all Field Grades. Social Work Officers will share equal access to these positions.

2. It would appear that we have convincingly begun the return to what we have always realized as **sensible accession programs, policies and products**. These are some of the initiatives:

a. We are back on the **Health Professions Scholarship Program (HPSP)**. (Last graduate from the first iteration for psychology entered the CPIP in 1984). There are increased numbers of scholarships in a staggered fashion eventually allowing 8 students each year to return to the CPIP. HPSP also requires APA-approved schools and therefore quality is enhanced. In a slow economy, HPSP is a very lucrative marketing tool for the AMEDD counselors.

b. There has been much effort to conduct the procurement of psychologists using a coordinated and uniform policy, especially as it applies to information distribution to prospective candidates. Additional products (e.g. **marketing video for CPIP**) allow the Army Medical Department counselor to distribute consistent information about the CPIP in general as well as a description of the functions and opportunities for the officer psychologist following the internship.

c. We have adopted the **Total Quality Improvement (TQI)** model for the recruitment process especially as it is applied to verification and tracking procedures used by AMEDD counselors for prospective intern candidates. Enables a completion of the loop of information requests that occur between the intern candidate, the CPIP sites and the AMEDD counselor are closed and responsive.

d. An improvement and update were made to the **Medical Service Corps' marketing pamphlet**. The recent update and by the OTSG Officer Procurement Branch, however, contains a few problems in the section dealing with psychology i.e., there are improper displays of parts of psychological tests. Staffing was initiated to correct this.

e. Prospective intern candidates often ask for comparisons and contracts of each of the Army's CPIP sites. A composite CPIP Brochure as designed to improve uniformity of information across sites for each intern candidate. **This tri-CPIP site brochure** was developed to provide the candidate information that would illustrate the similarities and differences across programs.

f. The Officer Procurement Division of OTSG has earmarked **promotional funds** which permits the AMEDD counselor to send select intern candidates (non HPSP/LTHET/ROTC ED-Delays) for CPIP site visits and thus, is another lucrative marketing tool. Also, the use of this money encourages the timely completion of the CPIP application and file as a contingency for the site visit to be granted.

g. The **Air Force** has three **CPIP sites**; the **Navy** has the same number. Many CPIP candidates are dually or triply applied to the Services' programs. We ave begun to **interface** more with the USN and USAF programs, especially on **APIC day** when one of the Services fills all of their required CPIP slots. This information is transmitted to the other Services.

h. Through the persistent efforts of the Officer Procurement Division, an identification process is now in place to locate **ROTC Ed-Delays for CPIP**. As a result, for the 1994 CPIP Board, two ROTC Ed-Delays will be considered. A ROTC graduating student may request and educational delay for the purposes of pursuing an advanced graduate degree in an subspecialty (for our purposes, Doctorates in clinical or Counseling Psychology) where the Army is experiencing (or projects to experience) shortages.

3. As a long overdue event, the **Field Psychologist's Kit** has recently been staffed and tested for revision. The first kit came into the inventory in 1952. The next revision was implemented in 1982. This second version however never fully replaced the first. (As an example, the first version contained the card-sort form of the MMPI. If any psychologist knows of the location of one of these kits, please contact the consultant. This should be placed in the AMEDD Museum).

a. In approaching the revision process, several ideas were used to guide the way:

1. In psychodiagnostics, there has been a substantial amount of increased automation for both the diagnostic's components, word processing requirements, data management, frequently used forms and telecommunication. Therefore, the test kit was recommended to have a laptop/notebook version with at least 120MB HD and modem capability.

2. There should be bilingual versions of diagnostics required, particularly Hispanic.

3. Consideration needs to be given to the possibility of a centralized draw and , distribution of a kit's contents and to increase psychodiagnostic availability for other mental health units within the area of operations.

4. There needs to be an increase the neuropsychology screening capability which was completely mission from the first two versions.

5. The kit's contents should extend beyond a purely psychodiagnostic format and consider other therapeutic applications such as biofeedback, audiotaped relaxation procedures and instructional/reference material (e.g., Stress Management Guidelines for Commanders; Psychological Autopsy SOPs;

AR 635-200, DSM-II-R, etc.).

b. Versions one and two of the kit contained four diagnostic instruments; the prototype contains 18 diagnostic instruments, seven of which are automated and two of which have the Hispanic version.

c. The prototype was prestaffed at FSH taking into consideration lessons learned from Operation Desert Storm.

d. To date, the prototype kit has been field-tried/ tested with the 10th Mountain Division during Operation Restore Hope in Somalia and with the 82nd Airborne Division during its most recent tour with the Multinational Peace Keeping Force in the Sinai as well as in a garrison operation with an element of the 528th Combat Stress Detachment (CSD) at Ft. Bragg, North Carolina.

e. The prototype kit is expensive. The cost is \$10,000 in its current proposed configuration which does not include the computer hardware. This needs to be reassessed at FSH to consider bringing some of the costs down.

4. Over the past several years, numerous worldwide scenarios have provided opportunities for validation of peacetime preparation for **wartime and peacetime requirements**. Here are a few examples:

a. **Operation Just Cause - Panama.** While no mental health units actually deployed to the theater of operations for this mission, many were involved in the predeployment and redeployment phases, especially at Ft. Ord, California.

b. **Operations Desert Shield & Storm - Iraq/Kuwait.** More mental health assets were in the Theater of Operations than in any previous conflict. The OM Psychiatric Teams (used during Viet Nam) were implemented and deployed with modifications to approximate the earlier concepts of the now activated Combat Stress detachments and companies.

c. **Operation Restore Hope - Somalia.** This was the most recent full scale deployment of large units as part of a UN relief effort. This mission also provided the first opportunity to field test the prototype of the Field Psychologists Kit.

d. **Implementation and Activation of Combat Stress Control Units.** Six detachments and two companies will be activated in CONUS & USAREUR during FY 93 and 94. Dr. Jim Stokes, from the AMEDD Center and School, staffed this concept for many years. As a result, TO&E Mental Health Units and intervention policy has initially been extended beyond the Division level.

e. **Psychologists as PROFIS fillers.** Operations Desert Storm and Restore Hope provided the first time that this deployment strategy effected psychologists.

f. **Reserve Psychologists Credentials.** Prior to Operation Desert Storm, there was little systematic attention paid to this issue in the reserve base. The problem essentially was that many reserve psychologists had not kept current their clinical privileges and yet were deployed to units and hospitals where that was the requirement. As such their clinical work had to be supervised. The current policy now calls for this credentialing and privileging process to be no different than that required for the active duty counterparts. There are approximately 144 USAR Psychologists effected by this policy change.

g. **Individual Mobilization Augmentee (IMA) Changes.** During Operation Desert Storm there were well over 50 IMA positions throughout the AMEDD inventory. The IMA concept had not been previously tested during conflict or deployment. Present policy states that IMA slots will exist only where there are PROFIS slots.

h. **PROFIS.** The establishment of slots and the appointment of psychologists to fill PROFIS positions tended to be somewhat of a random Process prior to ODS. Residents, interns and Directors of Training programs were often appointed to these slots. Upon deployment, the training mission was obviously compromised. Current policy states that Directors of Training Programs are not to be included.

i. **Newer TO&E unit designations and/or activations for USAREUR.** This is likely to occur over the next several years and will provide legitimate authorized positions for clinical psychologists. The 7th MEDCOM will become the 30th Medical Brigade (October 93) and will have a psychologist on its staff. The 68th Medical Group will also have a clinical psychologist authorization on its staff (Oct 1993). There will be two additional Combat Stress Control units for the USAREUR Theater.

5. **Aeromedical Psychology Short Course.** This course is designed for those psychologists assigned to units which have a substantial number of aircraft with an air support mission. The course is designed to provide diagnostic, therapeutic and consultative training given the unique requirements associated with the air support mission. Primary, secondary and tertiary interventions are covered. Furthermore:

a. Whereas the course was first recommended in 1947, it was not implemented until 1992.

b. The Aviation Command/Community at Ft. Rucker, Alabama impressively supported the concept. A great deal of support and resourcing was also received from the Medical Service Corps.

c. To date, 11 Army Psychologists have completed the training along with participation by a few U.S. Navy and U.S. Air Force personnel.

d. Thus, there are now two, annual short courses for Army Psychologists.

e. Regulation specific training is focused upon, e.g., AR 40-501.

f. Drs. Frank Edwards, Steve Bowles and Jim Picano were instrumentally creative in developing a hands-on, intensive, and realistic program of instruction over a three-week period.

g. Course #3 in FY 94 has been approved as a "Go" and will probably occur during the late part of November '93 and first part of December 1993 at Ft. Rucker, Alabama.

6. Improved/Modified Guidelines for Practice:

a. **AR 635-200.** Psychologists can now make the diagnosis of Personality Disorder for Administrative Separations as an independent clinical decision making authority. While this may seem a rather odd milestone at first, this has been a contentious issue for psychologists for well over twenty years.

b. **AR 40-66 and AR 40-68.** Categories of privileges defined to be consistent with accession policy that recognizes both Clinical and Counseling Doctorates for the AOC of 68S.

c. **APA and Confidentiality Conflicts.** APA has now addressed a ruling on the conflict between the principles of confidentiality and the requirements of military law and regulation to disclose clinical information under certain circumstances.

d. **The Department of Defense Mental Health Guidelines:** DoD has established guidelines and standards for the components of and initial mental health evaluation and treatment planning. These were developed by a Tri-Service, multidisciplinary mental health working group under the auspices of the Office of the Assistant Secretary of Defense for Health affairs.

e. **Representative Boxer's Legislation.** A soldier is entitled to due process when a mental health evaluation and disposition is being considered or conducted. While there remains some work to be done at the DoD level, within a short

period of time, the Department of Defense will provide implementing instructions to each of the Service Secretaries. There will no longer be "business as usual." The highlights of this legislation are:

1. For Outpatient Evaluations:

a. The Commander must consult a mental health officer prior to referring a soldier in non-emergency situations.

b. The Commander must provide the soldier with written notice to include the reasons for the evaluation.

c. The mental health appointment is to be scheduled no sooner than two days after the written notice is provided to the soldier.

d. The commander provides the soldier with the name of the mental health officer with whom he consulted.

e. The soldier is also advised as to their right to attorneys and the IG prior to the evaluation. Furthermore, the soldier is advised that they may select a mental health professional at their own expense for a second opinion. This is in addition to the evaluation requested by the commander.

f. The soldier's signature on an appropriate form is required attesting to having been advised and informed as to the above.

g. Emergencies clinical situations and evaluations as requested by command pre-empt the above.

2. For Inpatient Evaluations:

a. Following the admission, the soldier is informed as to why the psychiatric admission was required, the nature, components and expectations of the treatment plan and their rights to include:

b. The right to access friends, attorneys, Inspector General officers, etc.

c. The soldier must be evaluated by a Psychiatrist or MD within two days following the admission to determine if the admission was appropriate and if the hospitalization should continue beyond the two-day period.

d. If continued hospitalization is decided upon, then the soldier is notified in writing of the reasons for the continued stay.

e. The entire admission and hospitalization process is reviewed by independent physician within the hospital. The soldier continues to have similar entitlement to rights as with the outpatient evaluation and some additional ones.

3. One hallmark of the legislation, and actually related to the precipitant that generated the legislation, is the prohibition against the use of command referrals for mental health evaluations in response to or retaliation against a "whistle blower" within the unit. This is the precise reason that the commander today needs to consult with a mental health officer prior to referral for an evaluation. In this way, the merits of the evaluation can be collectively assessed. If the commander is found negligent on this particular requirement, the legislation clearly stipulates that such an action is possibly subject to possible UCMJ action.

f. **Separate Psychology Organizations within MTF's.** To reiterate, a separate psychology organization, by Congressional directive, will exist where there are training programs in psychology (i.e., internships and fellowships). To date, the separate services are DDEAMC, TAMC, MAMC and WRAMC. The separation has prompted a sincere examination of the organizational structure, function and philosophy of the separate services. Their individual practice policies and procedures require clear definition and distinction vis- a-vis those of Psychiatry in order to avoid duplication of services provided.

g. **TM 8-40 (Sep 1992): Military Mental Health and the Law.** Owing to the initiative of LTC Gregory Lande, a Forensic Psychiatrist from WRAMC, major revisions in this training manual were realized. The current revision eliminates the subjugate role of the clinical psychologist. This manual is highly recommended for all military psychologists. Dr. Lande's understanding of the forensic process, as well as his impressive appreciation of the role of mental health advisory process in this system is well illustrated in this manual. —

h. **FM 26-2 (August 1992) Management of Stress in Army Operations.** This is the first of its kind as to Field Manuals.

7. Improved Post Doctoral Fellowships:

a. The Neuropsychology Fellowship at WRAMC has been approved for an extension to a two-year model for the 1994 training start. Along with the neuropsychology fellowship at Tripler Army Medical Center, both programs will meet the mission requirements of the AMEDD. TAMC's neuropsychology fellowship is expected to be activated for a start in 1995. In 1994, a consortium model for the WRAMC program is envisioned with Georgetown University and the National Rehabilitation Hospital.

b. While WRAMC's program is more influenced by its interface with Neurosurgery, the proposed Neuropsychology Fellowship at TAMC is likely to be more influenced and oriented toward rehabilitation medicine.

c. The Army's in-house fellowships offer an opportunity for validating criteria for proposed post doctoral accreditation criteria. Several agencies (e.g., ABPP, APA, etc.) are developing these criteria.

d. Infusion of diplomate faculty into training programs. Director should be ABPP in the respective subspecialty and the assistant director should be a candidate for the ABPP in the same subspecialty.

8. **Psychopharmacology Demonstration Project (PDP):** This is one of those the Avant Garde programs for the Army and the Profession (Avant Garde: the Random House Dictionary definition...(a). the advanced group in any field, especially in the visual, literary, or musical arts whose works are characterized chiefly by unorthodox and experimental methods).

a. **Prescription Privileges.** I will address this program in more detail later.

b. **Admission Privileges for Psychologists:** Will occur across all of DoD. The policy addresses admission, attending and discharge components of care.

c. **Separate Psychology Services.** Three administratively separate programs have been established at Walter Reed, Dwight David Eisenhower, Madigan and Tripler Army Medical Centers.

9. **Operation Restore Hope to Somalia:**

a. Jeff Hansen was PROFISed to the 68th Medical Group from Madigan, Ft. Lewis.

b. Gary Southwell was PROFISed to the 10th Mountain Division.

c. In general, we may have overestimated mental health needs for this mission. Fifty percent of the 528th Combat Stress Control Detachment was also deployed.

10. **Changes occurring within the AMEDD:**

a. **New Medical Service Corps Chief:** The new boss is BG Jerry Faust who is dual-hatted as the Deputy Commander of the AMEDD Center & School and Director of the AMEDD Proponency. BG Faust's primary office will be located at Fort Sam Houston.

b. The Academy of Health Sciences (AHS) is now the USAMEDD Center and School.

c. **Restructuring** is occurring throughout the AMEDD:

1. **Task Force Aesculapius** is the principle architect for the reorganizing and restructuring of the AMEDD.

2. **Task Force Clement** was also conducted to further review the structure and organization of the now Office of the Surgeon General.

d. The new **U.S. Army Surgeon General** is LTG Alcide LaNoue.

e. The MSC will develop an **Officer Distribution Plan (ODP)**: The corps has never truly used this concept in the fielding of units. The Medical Corps been using an ODP for quite some time. The basic idea is that we have a limited inventory to be distributed to authorizations. Proposals will be routinely made to the MACOMs which will in turn have input and comment. Once it is final, the MACOMs must live with the plan thereafter.

f. Newer specialty number designator:

<u>Medical Functional Area</u>	<u>Old AOC</u>	<u>New AOC</u>
Behavioral Science Off		67D00
Social Work Off	68R	67D36 —
Psychologist	68S	67D37

* However, keep an eye out for the "New-New" numbers.

THE CHALLENGES

Along with these events, there is an additional category of initiatives that might appropriately be labeled as "Stalled, Developing, Uncertain and Broken". Obviously these are items that will continue to command the attention of all of us and will require constant monitoring by the consultant as well as some of our military, professional and national leadership.

Many of these have already tested and challenged Army Psychology and will continue to do so. Each demands a critical review of time-honored traditions and protocols of health care and historically accepted values and standards.

"Tailhook" alone precipitated a critical look at what was heretofore a shameful and painful ignoring of the demeaning aspects of a time-"honored" military tradition or standard. It precipitated a review process that now cuts across all services and all ranks. This illustrates how sometimes, the status quo is requires a crises that is disruptive to facilitate a sincere examination for change.

Perhaps in an odd and distorted parallel fashion, the health care crises is akin to "Tailhook". At the very least, because of the chronic erosion of efficiency in health care, we must accept some disquieting and difficult examination of the traditional ways of doing business in health care.

Furthermore, the sometimes sacrosanct attitudes of traditional health care providers are being challenged in every conceivable possible venue of health care. The staunch traditionalists among them will wither if they do not embrace these changes and become players in the initiation of health care reform. It is quickly becoming more an issue of "what" is provided in the health care today compared to the traditional "by whom" criteria.

What follows might be considered as "Targets of Opportunity" as Col Joe Fishburne, a former Army Consultant, was often heard saying in his consultations with younger military psychologists. As such, they represent options for our specialty to influence the shape and future of the military personnel structure, health care delivery systems as well as the profession itself.

As an aside, while listening to testimony in Congress by members of our military profession, as they individually testified as to their concerns and apprehensions if DoD were to drop the ban against homosexuals in the Armed Services, I was particularly struck by one statement of one of the panelists. The officer indicated that the military should not be considered as an opportunity for social experimentation.

While I am sure that I am paraphrasing that officer's statement, the essence of it seemed to me as rather ironic since that so much of what occurs in the military frequently becomes a de facto validation process for what is subsequently promulgated throughout the civilian sector, whether it be industrial, medical, scientific, social action, communication, etc. Traditionally, the armed services and the federal sector in general are identified and targeted as a sociological test bed because of the greater amount of control that typically can be

exerted over the constituency and as well as over other factors and, thereby reducing some of the error variance.

Our clinical practice, research and programs can be viewed as targets of opportunity for the military and the health care marketplace as a whole. My chief concern is that we do not adopt a "head-in-the-sand" response to the overwhelming aspects inherent in the chaos of change.

These opportunities require collective input from all components of our profession in the U.S. Army. In that regard, perhaps one of my greatest regrets over the past four years is that I did not engage more of you in the process of developing, organizing, and directing some of what has been done and what still needs doing. Well, needless to say, what follows is a list of your "Targets of Opportunity" for you and the new consultant. I encourage all of you to become involved and make these opportunities have your unique signature on them for the future:

1. Diplomat Specialty Pay:

a. The 103rd Congress readdressed this issue in conference language. The key ingredient to implement the language as described is to focus on the issue of professional recognition and secondarily on the issue of retention. As I have said before, the diplomat pay issue should have never been tied primarily with the notion of improving retention. Such a small percent of the clinical professional workforce in APA seek and achieve this credential; an even lesser percent of the DoD psychologist work toward attaining it. There are several types of positions within the civilian workforce that stipulate this credential as a preferred document for openings. No such position identifier has made it in the military authorization base but certainly should be as in the case of our post doctoral directorships of fellowships.

b. The Diplomat is a must if clinical subspecialization is to continue and if the fellowships are to keep pace with the rest of the civilian community. This becomes even more critical with the advent of post doctoral program accreditation criteria; most of the proposed models call for the faculty to have the ABPP Diplomat in the respective subspecialty.

c. There needs to be no less than 4 Diplomates for our Fellowships. Furthermore, each fellowship's assistant director needs to be a diplomat candidate in the same subspecialty. This will insure continuity in this required credential when the director assumes another assignment.

2. Admission/Treatment/Discharge Privileges:

a. The Army's plan will be provided to the MACOMS and commanders by 1 June 1993.

b. The plan is flexible enough to allow for local commander's discretion for implementation.

c. The plan embraces the requirement of JCAHO that the medical input to the admission, treatment/attending and discharge plans not be ignored.

d. The proposed plan complies with other states' initiatives on this matter in addition to the JCAHO guidelines.

3. OPM (Office of Personnel Management) looks at Psychology...finally:

a. The Position and Classification Standards are first to be examined for revision. This will allow for more accurate matching of the job description with the appropriate level and type of psychologist.

b. The Qualification Standards are next and are perhaps the greatest interest to the current DoD Uniformed clinical and counseling psychologists. There has been a continuing need to develop uniform qualification standards for both the uniformed and civilian psychologist.

4. **Newer Skill Badge?** . The next possible opportunity for a skill badge for psychologists and other members of the mental health fields might be affiliated with the Aeromedical Psychology Short Course. This proposal will require strict review and approval and will take time and diplomacy.

5. **Marketing the Fellowships.** We need to do a better and more efficient marketing effort for our Fellowships. There have been too many years that the slots have not been filled and not necessarily from a lack of interest:

a. Often enough, the worldwide twix-message does not reach the eligible psychologists.

b. Better marketing information of the program's contents is needed.

c. The Fellowship directors need to be more aggressively involved in the marketing, review and selection processes.

d. There is the possibility that a Forensic Fellowship may be developed at USUHS in the future. Congressional

conference language requested that USUHS develop postdoctoral programs with the subspecialties generated from input from each of the three uniformed Services.

6. **DoD's Policy on Homosexuality.** This policy has come under a great deal of scrutiny as a result of the political platform adopted by the Administration during the pre-election process. As a summary of the events of our professional association related to this conflictual issue, the following is provided:

a. Early in 1991, the American Psychological Association banned the military's access to advertisement in the Association's sponsored journals and denied access to the booths at convention centers for recruiting proposes.

b. In August of 1991, the Council of Representatives at the APA Convention in San Francisco, struck a "deal". The deal was the result of meetings between the DoD Clinical Psychology Consultants, Division 19 (Military Psychology) and various factions within APA representing the Gay and Lesbian communities. The "deal" stipulated that advertisement would be permitted until December of 1992. Advertisements would reflect the current DoD policy on homosexuality as well as stipulating that all recruits had to meet all other requirements for enlistment or commissioning. Furthermore, for the advertisement to continue in APA publications beyond the December 1992 date, the Department of Defense had to demonstrate a significant change in the current policy. Obviously there was much discussion, without resolution, as to what constituted a demonstration of "significant" policy change.

c. The somewhat unfortunate outcome of the "deal" struck was that it was only acceptable to USN for advertisement purposes. Air Force and Army recruiting authorities felt that the inclusion of the DoD policy in the add itself was negative advertisement for which they were not willing to invest resources.

d. In actuality, for the 1992 CPIP Board, there did not appear to be any significant, measurable effect as a result of the "ban" by APA. Internship slots were filled to capacity across all programs of DoD.

e. The DoD Psychology Consultants nevertheless continued to address its concerns on this issue via its participating in the Council of Federal Psychology Practitioners of APA which met on a quarterly basis.

f. The DoD Psychology Consultants' were invited to provide input on this issue to the Rand Corporation which was contracted by DoD (i.e., Secretary of Defense, Las Aspen). The

key points emphasized by the consultants were that:

1. this issue should be approached as a management and not a mental health problem,

2. the managers and the leadership of the Services should be the key designers of any newer policy, and

3. that previous social policy and program change adopted by the Services in the past (as with the EEG initiatives) be viewed cautiously (i.e., knowing the limitations and lessons-learned from these initiatives) in the adoption of any similar paradigm for program adoption and implementation.

7. **Application for the Fellowships.** There can be many constraints, distractors and rules for a fully qualified psychologist to be competitive and eligible for fellowship consideration.

- a. The current eligibility criteria include:

1. be enrolled or have been an Officer Advanced Course (OAC) graduate upon application for the fellowship;

2. if the officer does not have the OAC, the requirement to be a graduate may be waived to submit an application for the fellowship if he/she has 5 years of active federal commissioned service years. Under current policy, the officer still needs to attend the OAC eventually in order to remain competitive for promotion considerations to the rank of Major. Therefore, one can see that this delay exemption is of little use for the psychologist who enters the Army as a non-due course (i.e., as a Captain) officer;

3. the officer needs to be in a Voluntary Indefinite (or VI for which the officer is automatically boarded after 24 months on active duty status) which also may be waived if they have prior commissioned service;

4. the applicant must have a least two years time-on-station. In the case of overseas assignments, the candidate must complete the tour of duty before starting the fellowship or the OAC.

- b. We need to consider modifying some of the eligibility criteria since our greatest retention problem is between the 4th and 10th year of service following the internship.

- c. The eligibility criteria seem to be insensitive for non-due course officers as well as insensitive to the other subspecialties represented on the 68 side of the Medical service

Corps.

8. Psychopharmacology Demonstration Project (PDP):

a. Year 2 of the first iteration of the PDP has been completed. This first iteration has been extended to May 1994 to permit the two fellows to have an adequate clinical practicum component. Their Basic Science Component or didactics were successfully and unequivocally completed by both of the fellows.

b. In general, during the didactic phase of the first iteration of the PDP, the performance of fellows exceeded all expectations but not without a lot of blood, sweat and tears on their part.

c. As is well known, there was a loss of one fellow who voluntarily withdrew from the program. As of this paper, two Navy fellows and one Army fellow remain. There is however, a real possibility that the Army Fellow will be accepted to the USUHS medical school given his rather impressive performance with the medical school curriculum associated with the PDP.

d. The American College of Neuropsychopharmacology (ACNP) continues to perform the external evaluation of the PDP. At the time of the writing of this paper, this evaluation panel has visited the Psychopharmacology Demonstration Project five times. Their findings are quite comprehensive and enable the project director and training director to implement the required changes in this innovative project. As an example, there will be a totally revised curriculum to support the program and the length of these didactics will be held to one year for the next iteration.

e. The revised curriculum was reviewed by the ACNP, reviewed by the Office of the Army Surgeon General and endorsed by the Office of the Assistant Secretary of Defense for Health Affairs. Furthermore, portions also will be attended by the-Nurse Practitioner students of USUHS and Clinical Neuropsychology Fellows of WRAMC.

f. One of the most significant additions which exponentially added to the credibility of the project has been the assignment of a full time medical director of training in the Psychology Department for the duration of the project. As a psychiatrist, Dr. Marvin Oleshansky brings with him a vast amount of formal fellowship training in psychopharmacology as well as an impressive clinical practice background. It was principally through his efforts that the newer curriculum came into existence as he brought together many departmental resources throughout USUHS. Marv will also play a visible role on inpatient psychiatry wards throughout the clinical practicum for this iteration. As can be seen, his position is extremely demanding and

comprehensive. He is also to be admired for his willingness to place parochial issues aside and follow his intuition that psychologists can do well in this arena with the proper training and guidance and do not have to attend all of medical school to practice psychopharmacology as part of their clinical acumen.

g. The next iteration is scheduled for 6 July 1993. The identified, reviewed and approved fellows are Major Tim Adams for the United States Army and Captain Jim Meredith for the United States Air Force. At one point, it seemed possible that we were going to have a very well-qualified candidate from the Public Health Service. His inclusion would have been a tremendously exciting opportunity to validate the feasibility of the PDP. Unfortunately, his aspirations could not be realized at this time but certainly will be pursued for future iterations. It is imperative that the feasibility of this program eventually extend beyond the formal, traditional DoD lines.

h. One of the most important issues facing the project managers and policy makers revolves around preparing the graduating fellows of the PDP for their follow-on assignments. Additional focus this year will be upon the credentials and scope of practice issue for the fellows when they depart the training program.

i. On numerous, occasions, the ACNP has recommended an Advisory Panel at the OTSG level to be established as a standing entity to examine and provide guidance on this program. Such a panel was envisioned as having representation from each of the services involved. Thus far, the Advisory Committee has not been formed.

j. As most of you are aware, the issue of certain state license practice statutes for psychology could prove to be an the next battlefield for this initiative. Some states actually in their definition as to what a psychologist is as "one who does not prescribe drugs". I share the view of others however, that, by comparison, this is probably one of the easier "battles".

9. Downsizing:

a. The entirety of the Armed Services inventory is in a constant state of flux. There are many ways of achieving 535K Army but I am not convinced that figure will remain constant. However, all of what we are examining as a force structure in the Medical Service Corps as a compliment of the big picture projects a force of 4262 officers.

b. **Officer Proponency** at Fort Sam Houston Texas will maintain the rank distribution for psychology on a level field and proportional to the downsizing requirements. Alternatively, the pyramid might get smaller as to the absolute numbers yet the

opportunities for promotion will remain constant with this agencies' monitoring.

c. There will be an increased opportunity for psychology to profit from what has traditionally been known as **Branch Immaterial Slots**. In today's force structure for the Medical Service Corps with and the newer combination of the Social Work and Clinical Psychology Fields into one Main Functional Area (MFA), we will find ourselves in direct competition for promotional opportunities with our colleagues in Social Work. However, the two MFAs have identified positions in the authorized inventory that can be equally managed, executed, etc. by either of the AOC's (Area of Concentration). In every instance, the identified positions are at the field grade level.

d. As a part of the downsizing, stay tuned for additional **base closures and unit deactivations**. During this fiscal year, we are fairly certain of the deactivation of the 7th Infantry Division at Ft. Ord, California and the 9th Infantry Division at Ft. Lewis, Washington. Both of these locations have been impressive sites for historical pre and post doctoral training programs for Army Psychology.

e. Given the required downsizing, there undoubtedly will be substantial changes in the **Exceptional Family Member Program (EFMP)** throughout the Department of Defense and especially within the European Theater. I suspect that there will be reduced positions for psychologists within these programs which will then ultimately effect the training missions of some out fellowships the are feeder training programs for these positions. For the fellowship training programs however, the net effect to reduce mission will be "yes" for certain requirements but total mission requirements maybe result in a "no" given the incredible pressure (and increasingly, incentive) to recapture CHAMPUS workload. The graduate of today's Army's Child and Pediatric Fellowship and their directors have little to worry about in this regard.

f. For Army psychology, **more emphasis on the Go-To-War missions and requirements** will be seen in all training programs. By way of illustration, every psychologist should know if they are/are not assigned to a PROFIS position within their unit. These positions frequently change and in many instances may not reflect a change (or anticipate and /or appreciate) in the status of an individual psychology officer (such as can be the case when moving from a staff position to a training position within the same Department of Psychology).

g. **Selective Early Retirement Boards (SERBs)** are here to stay for a while until the force is properly sized. This has been the case constantly since I can remember the first SERB in 1987 when I was stationed in Europe as the USAREUR consultant. A

potential officer to be "SERB-considered" is typically advised that the rules for the SERB are similar to a promotion board. Common sense however dictates that the perception is obviously radically different for those who are considered for a SERB. It is rather ironic that the most successful officers within the MSC, who have achieved their current positions by virtue of conscious direction and selection of career enhancing options, are having to relegate the continuance of such career to yet another "board" following the attainment of success in their careers.

h. For as long as I can remember, the **accession requirement** each year for Psychology was 16 (Although, I admit that I never understood the "model" that drove this figure.). The current "model" is now well promulgated and published by AMEDD Proponency. Given the required reduced force, we are now accessing a newer total into psychology at 12 in FY 94 and beyond.

i. As an alternative, yet a most unpopular method for sizing the force, **Reduction-In-Force** options are a legal reality. Fortunately, as a result of proper management and sizing of the force, Psychology has not had to participate in any recent Army RIF.

j. It is imperative that each psychology officer is aware of his/her **promotion year group (PYG)**. Regardless of your current rank, this parameter appears to be the driving force which will be used to make critical decisions as to your future. Know your promotion year group; this is the "yardstick". If you have any questions as to how this directly impacts on your own, individual career path, I suggest that you call Col Grill. He will be able to provide you a "forecast" of the numbers of officers in your particular group matched against the required number or goal for that particular year which was developed by AMEDD Proponency.

10. **Fellowships/Training:**

a. The American Psychological Association has several ongoing initiatives to develop **standards for post doctoral fellowship program accreditation**. The DoD in-house fellowships (as in the Air Force and Army) are excellent opportunities to validate these standards since the required subspecialty clinical functions can be easily identified in the field. We train to requirements. I have extended APA offer to use our programs as a basis for trial testing the accreditation process.

b. **The Directors of Training** of the fellowships should be accorded special consideration since there are so few programs and since not every sub specialized clinician in psychology can necessarily direct the training in that subspecialty. Therefore,

I would propose:

1. Increased stabilization of tours from the current policy of no more than four years on station to no less than seven.

2. The fellowship director should be diplomate qualified in the respective subspecialty and the assistant director should be a candidate for the same.

3. The whole question of officer availability for the fellowships needs to be better attended to. We have done a poor job in the past with our marketing efforts on our programs and we have not yet figured out how to identify the pool of officers most likely interested in the advanced training. We have also not done an adequate job in the advertisement of the programs either.

c. It goes without saying that the **Psychopharmacology Demo Project (PDP)** has a lot of emotion surrounding its execution. The future success of the PDP depends upon many factors including:

1. Maintaining objectivity and empiricism. This is the reason for the external evaluation by the ACNP.

2. Maintaining flexibility in training models. While there are known models of training for physicians, there exists no similar paradigm for the training of a health care provider in a focused fashion (i.e., psychopharmacotherapy). The initial model adopted for the PDP approximated that of the first two years of medical school with only very slight modification. This was probably a training model of convenience because it was quickly recognized that the development of a newer and separate curriculum for the PDP would require substantial resources and time. The first model was also often recognized as probably "too much didactic" which ultimately would require some sculpturing.

3. In order for the program to proceed forward while minimizing the parochial biases on both sides of the issue, all directors and trainers need to recognize the fact that nobody "owns" psychopharmacology and therefore, we're not "taking away". On the contrary, one of the principle goals of the PDP is to expand the regimens of health care to the entitled beneficiaries.

4. The basic science curriculum being developed at the Uniformed Services University of the Health Sciences for the PDP may also meet the training requirements for other health care professions. Accordingly, coordination efforts are under way by Dr. Oleshansky, the PDP Director of Training, to involve the Family Nurse Practitioner and Nurse Anesthetist Programs at USUHS in the PDP curriculum development.

d. **The Long Term Health Education and Training (LTHET)** program of the Medical Service Corps has traditionally been a source of some of the best trained and competitively qualified clinical psychologists in the U.S. Army. Through the LTHET, officers with considerable experience in the Army and in leadership and management positions are provided an opportunity to become a clinical or counseling psychologist. Only recently has the LTHET come under some criticism for a variety of reasons. In the immediate future, LTHET, as a tool to provide resources to meet shortages may need to be temporarily discontinued for the following reasons:

1. Over the past few years, a number of LTHET "scholarship" officers have not been selected for promotion for the next higher grade during their training programs. In some instances, an officer was twice non-selected and therefore, could not enter the Clinical Psychology Internship Program upon completion of their didactics. This was an obvious loss to Army Psychology and a major disappointment to the officer involved who now had to look for an internship within the civilian base in order to complete all requirements for the doctorate.

2. In these extremely competitive times, with the force downsizing, on the promotion boards, there may be the perception that Academic Efficiency Reports (AERs) are not as competitive vis-a-vis other officers' OERs of the same Area of Concentration. Remember, the LTHET officer who is considered for promotion is not "matched" and compared with other psychologists; his reference group is his parent AOC before he began his doctoral studies.

e. **The USUHS' Ph.D. Clinical Psychology Program** is very much alive and well. An impressive curriculum has been developed and candidates from all three services are now participating in staggered fashion across the first and second year of the program. The following are some of the developments and initiatives that are ongoing with this program:

1. There will be an advertisement for the position of the Clinical Director of this program in the August '93 issue of the APA's Monitor.

2. The clinical program is embedded within the Department of Medical Psychology at the present time. Dr. Jerry Singer, Department Chair, is reviewing strategies which would provide the two programs equity in departmental identity yet under the same administrative "roof". One proposal suggested that the programs be housed within the Department of Medical and Clinical Psychology. This particular proposal would enable the graduate to have the best of all possibilities. He/she would profit from the immense scientific credibility that the Department of Medical Psychology has enjoyed for years while at

the same time matriculate in a doctoral clinical program that would meet all the requirement for membership in such organizations as the National Register of Health Care Providers in Psychology.

3. As a result, the scientist-practitioner model has been the operative model of training for this program with perhaps a slight more emphasis on the former component of this model.

4. The original curriculum that was submitted for this program was a proposal and a draft and a requirement response to the original Congressional language that prompted its initiation. The three clinical psychology consultants to the Services' Surgeons General, along with the internship directors of the DoD CPIPs, have conducted ongoing meetings as an advisory body for USUHS in the curriculum design and development. The single most difficulty faced by the University is in the process of acquiring the appropriate clinical faculty to not only conduct the required lectures but to give the program its needed identity for purposes of accreditation. The participation of the clinical directors from the DoD Chips also represents an innovative strategy first in the development of similar clinical curriculums.

5. To date, one U.S. Army candidate (Captain Jack Trakowski) from the LTHET program has been enrolled in the program since August, 1992. Another LTHET Board will convene in July 93 to consider two additional candidates for the 1994 academic year starts. However, the other services were instructed to start a candidate, one each, for the 1993 academic year start.

SUMMARY

These are some of the challenges that your subspecialty in the AMEDD has addressed, tackled and provoked as future initiatives for the future and over our most recent past. As your consultant, I am humbly honored to have been given the opportunity to be part of this process. I only hope that I leave my dearest friend and confident, Lieutenant Colonel Dennis Grill, with a situation that is, by some small measure, slightly improved from when I first started in 1989.

I think that this transition process from myself to Dennis is somewhat unique for the position of clinical psychology consultant in the AMEDD. Specifically, I do not think that we have ever transferred the Consultant's position and responsibilities in a similar public forum with the outgoing consultant remaining on board in a position as a clinical psychologist within the AMEDD. Certainly, Dennis and I have discussed this matter in some depth and how I might continue to

be of service to him, our subspecialty and the AMEDD. When we have discussed this issue, he has often made the analogy to the "Godfather" movie. As a metaphor, the Godfather has a scene where the former Godfather is afforded the status of "Concilere" by virtue of age and hopefully of wisdom. As a result, Dennis has asked and certainly I would be honored to have such a position in the "Family".

It is with the most pride and confidence that I can muster, and with the endorsement of The Surgeon General of the Army and The Chief of the Medical Service Corps, that I officially transfer the responsibility of the position of Clinical Psychology Consultant to Dennis. Over time, you will surely discover all of those impressive attributes and qualities about him that I have had the fortune to observe and profit from over the past four years.

I salute all of you and I am looking forward to a couple of more years (hopefully, relatively calmer) of continuing to be an active player within the Army Medical Department Psychology profession. I am deeply indebted to all you for giving me an exciting and challenging capstone experience for my career. I couldn't have asked for more or better. **WHAT A WAY TO GO!**

AUTOMATED NEUROPSYCHOLOGICAL ASSESSMENT: DOD CONTRIBUTIONS

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This paper presents an overview of micro-computer technology that has been found to be particularly useful as neuropsychological assessment instruments and whose development has been sponsored by the Department of Defense (DOD). More specifically, our presentation focuses on psychological assessment procedures that were developed for repeated-measures testing in the late 1970's and early 1980's by the Joint Working Group on Drug-Dependent Degradation of Military Performance (JWGD3) under the direction of Dr. F. W. Hegge. The JWGD3 research and development program was the outgrowth of concern that the use of chemical weapons in future wars was a realistic possibility. Further, there was concern that operators of major weapons systems, e.g., military aviators, might place themselves or their missions at risk after injecting themselves with central acting antidotes, such as atropine. Another major research issue related to this chemical defense program was more a pharmaceutical safety question, i.e., would recently developed chemical defense pre-treatment drugs such as pyridostigmine could have deleterious effects on performance. The overall question was, to what degree would use of a pre-treatment drug or an injection of antidote result in a significant decrement in cognitive functioning and hold the potential of endangering-lives during military operations?

Psychometric Considerations in Test Selection and Development

A major incentive for DOD to sponsor the development of performance tests, particularly, neuropsychological ones, was the knowledge that the chemical defense medications under consideration for use in combat settings produced changes in central nervous system (CNS) functions. However, the neuropsychological assessment technology available was deficient with respect to standardization and appropriateness for the repeated-measures designs required for evaluation of these pharmaceutical compounds. It had been demonstrated that a number of the traditional and most sensitive measures of neuropsychological integrity, e.g.: the Trail Making Test,

Symbol-Digit Modalities Test, Rey-Osterreith Complex Figure Test, and other measures were vulnerable to the effects of practice, while others, such as the Category Test might not be sufficiently sensitive to subtle degradations in performance over time.

Several established psychometric principles had to be considered for the selection and use of neuropsychological tests under conditions of repeated or serial measurement. One of the more important principles concerns stability of performance over repeated testing. Stability is demonstrated by the presence of level or linearly changing means or standard deviations across sessions. Stability is a desirable characteristic in a repeated measure, although an overly stable measure may be insufficiently sensitive to genuine change over time.

Another important principle is that of sensitivity, which may be conceptualized as a test's ability to detect actual changes in subject or experimental conditions, over time. Here again sensitivity is a desirable characteristic in a repeated measure, although an overly sensitive measure may prove to be insufficiently stable for repeated use.

Clearly, there are meaningful trade-offs regarding stability and sensitivity. As one considers issues such as validity and reliability, it should also be noted that an overly stable measure may not be sufficiently sensitive to change, and that overly sensitive measures may change in response to normal within-subject "noise", thus obscuring a true effect. A useful neuropsychological measure is one that will strike an optimal balance between stability and sensitivity to maintain its reliability and validity under conditions of repeated measurement.

In the late 1970s, Dr. D. Thorne and his colleagues at the Walter Reed Institute of Research (WRAIR) began to investigate the use of reaction-time based tasks for the purpose of repeated measurement. Their work led them to recommend the use of — efficiency measures over accuracy measures in neuropsychology. Their work was dependent upon the development of millisecond-accurate response measurement. Thorne described a novel psychometric extrapolation, "through-put", described as the "number of correct responses per unit of time". Throughput is a metric that characterizes the relationship between accuracy and speed. This is important in that in complex cognitive paradigms the measurement of processing efficiency evolves as the more sensitive measure of differences within an individual as well as the more sensitive measure of differences between individuals. Throughput measures appear to amplify the relationship within and between individuals, more so than do accuracy level or reaction time, alone.

Another important consideration is that the "factor structure" of a given task can change over time. In one study, Fleishman (1984) demonstrated that a visual choice reaction time task initially measured spatial-perceptual skills, but over time was more affected by general reaction time and motor control. That is, as the test became overlearned it transformed from a spatial processing task to a motor efficiency measure.

The Case for Automated Testing

General guidelines of repeated measures testing were developed at the Naval Biodynamics Laboratory, in New Orleans in the 1970's. Conclusions from this research which produced a battery called Performance Evaluation Tests for Environmental Research (PETER) were outlined by Dr. Robert Kennedy, CAPT/USN/RET, and recommended that such procedures:

1. be psychometrically sound
2. be portable and hardy
3. maintain their sensitivity over time

It was concluded that microcomputer-based testing provided the optimal vehicle for standardized presentation of stimuli, creation of multiple test forms, maintenance of stimulus control, provision of reliable timing, ease of data management, and access to novel behavioral metrics. Based upon their work and that of others, the following guidelines for repeated measurement were recommended:

1. Establish stability and sensitivity of the measures in advance of testing.
2. Obtain an adequate baseline prior to formal testing.
3. Use computer based tasks.
4. Emphasize efficiency measures, (i.e., response time and through-put rather than accuracy or error derived data)
5. Emphasize general versus specific measures.

HISTORY OF JWGD3/OMPAT TEST DEVELOPMENT

In 1984 a group of five experimental, neuropsychologists, and human-factors engineers met at the Naval Medical Research Institute with direction from the Tri-Service Joint Working Group on Drug Dependent Degradation in Military Performance (JWGD3) (which has since become the Office of Military Performance Assessment Technology (OMPAT)) to create a set of standardized tests for the purpose of assessing performance over time during repeated testing procedures. The purpose of the meeting was to review tests from the major and existing computerized batteries

for selection in a standardized Tri-Service battery. It should be noted that appropriateness for repeated measures testing was a primary criterion for inclusion. During this three-day meeting, Army, Navy, and Air Force psychologists produced specifications for the Unified Tri-Service Cognitive Performance Assessment Battery (UTCPAB), (Englund et. al., 1989, and Kane and Kay, 1992). Tests selected for inclusion in the UTCPAB had been developed independently by different laboratories with little concern about standardization or comparability of results, the purpose of the UTCPAB development was to reformat the selected tests to meet strict standardization criterion. The batteries that were reviewed included: 1) The Navy's Performance Evaluation Tests for Environmental Research (PETER) battery (Bittner, Carter, Kennedy, Harbeson & Krause, 1986); The Walter Reed Performance Assessment Battery (WRPAB) (Thorne, Genser, Sing & Hegge, 1985); The Naval Medical Research Institute Performance Assessment Battery (NMRI-PAB) (Schrot & Thomas, 1988; Thomas & Schrot, 1988); and the U.S. Air Force Criterion Task Set (CTS) (Shingledecker, 1984). The end result was selection of 27 tests for inclusion in the UTCPAB along with rules for standardization of these tests to support development of Tri-Service batteries.

Tests from the original JWGD3/OMPAT 1987 inventory have recently gone through a second and major evolution. The tests have been modified to permit millisecond accuracy in timing through the use of sophisticated software routines that Automated Neuropsychological Assessment eliminate the need for "add-on" timing boards. This modification has significantly increased the portability of the tests. They now run on laptop and notebook computers and are suitable for use in remote locations. In addition, the subject-response interface has been modified. Most tests now allow the use of a Microsoft or Logitech compatible mouse and are designed so that subjects can respond to test items by clicking either the left or right mouse button. This modification improved timing accuracy and simplified the task of interfacing the subject with the computer. The UTCPAB designation has been replaced and the general OMPAT library of tests is—referred to as the Tester's WorkBench (TWB).

In addition, a special TWB subset, the Automated Neuropsychological Assessment Metrics (ANAM), has been developed to bridge the gap between performance and clinical applications of computer-based tests. ANAM has given OMPAT a collection of sensitive and sophisticated tests for use in assessing changes in performance resulting from either environmental stressors, injury, or neurologic disease.

ANAM has been designed with emphasis on both clinical and experimental applications which require repeated measures testing. A large pool of test items together with pseudorandomization techniques give each test a large number of multiple forms. This permits ANAM tests to be used during

extended baseline testing and for monitoring performance over extended periods of time. ANAM tests have been constructed as self-contained testing modules that can be easily re-configured and "fine-tuned" to compensate for individual differences and changes in environmental demands. Additionally, subject instructions are written as independent ASCII files that provide an easy mechanism for adaptation of tests for a multi-national or multi-cultural administration. The ANAM battery will be employed in this project and configured as a customized "NASA" subset designed for monitoring performance during extended missions in space.

The ANAM Batteries - Background & Research

The ANAM project began formally in 1990. The purpose of the project was to adapt a subset of OMPAT developed tests for neuropsychological assessment and make them available to clinicians working in medical settings (Kane and Kay, 1992). While a number of useful neuropsychological measures had been developed for assessing patients with neuro-cognitive impairment (Kane, 1991; Lezak, 1983), clinicians were not able to take full advantage of the standardization, range of tasks, and timing accuracy afforded by the computer (Kane & Kay, 1992). It was felt that a tool like ANAM could significantly augment traditional clinical testing procedures. In addition, the need to assess patients in a serial manner was becoming an increasingly important task in neuropsychology. Serial assessment was important for monitoring medication effects, tracking the progression of and recovery from disease, and in treatment research. Traditional neuropsychological tests were not developed with these repeated measures uses in mind. Consequently, the time appeared right to bridge the arbitrary gap between clinical neuropsychological and laboratory performance assessment.

Initially, ANAM was direct outgrowth of a UTCBAB spinoff, i.e., the AGARD-STRES Battery (Reeves et. al. 1991) which had been developed for environmental and aerospace research by the North Atlantic Treaty Organization (NATO). However, ANAM subsequently evolved into a broader library of automated tests constructed to meet the need for precise measures of processing efficiency in a variety of cognitive domains among a wide variety of neurologically impaired patient groups.

The following is a listing of individual tests currently available in ANAM V3.0 batteries:

1. Subject Information Form
2. Stanford Sleep/Fatigue Scale
3. Simple Reaction Time
4. 2-Choice Reaction Time
5. Simultaneous-Spatial Processing Task
6. Successive-Spatial Processing Task

7. Procedural & Symbolic Reaction Time
8. Running Memory
9. Sternberg Memory Search Task (alphabet and symbols)
10. Extended Running Memory (Continuous Performance Task)
11. Unstable Tracking
12. Dual-Task (Combined Memory Search & Tracking)
13. Moodscale II (From the Walter Reed PAB)
14. Matching To Sample
15. Code Substitution & Delayed Memory Task
16. 4-Choice Reaction Time
17. Tapping
18. Pursuit Tracking
19. Tower of Hanoi (Tower Puzzle)
20. Stroop Color/Word Interference
21. Letter/Symbol/Digit Span Tests

ANAM has undergone a steady evolution and expansion since its inception in 1990. The present version includes a multi-level set of batteries designed for assessing fitness for duty in high functioning patients to diagnosis and assessment of patients functioning in the demented range of performance. The development has been guided by a continuous series of case studies involving patients referred from neurology and neurosurgery clinics in a variety of major medical centers such as the National Rehabilitation Hospital, Walter Reed Army Medical Center, the National Naval Medical Center, and Baltimore VA Medical Center.

As a result, ANAM is the only existing battery with built-in concurrent validity, because the "patient's" and their disabilities directed the modifications necessary to make the ANAM subsets appropriate and sensitive enough for clinical use. Clinical adaptation of the battery has required modifications of the original tests such as larger stimulus displays, forced-pacing response-time deadlines, addition of simplified response devices such as the mouse, and a more flexible executive menuing system and analysis support programs. As a result, final standardization of the subtests has only recently been completed. Consequently, a limited number of investigations have been possible using the ANAM subsets. However, a review of the currently available data is presented below along with a list of studies currently underway using the ANAM battery.

PERTINENT ANAM STUDIES

WRAMC/NIH

Customized subsets of ANAM are currently being used to track recovery from mild head injury and to assess efficacy of therapeutic interventions. One such study is a 7-Center Department of Defense-Veterans Administration joint head injury project. Here, ANAM subtests are being used to augment traditional metrics to determine the effectiveness of short-term interventions. The objective of this program is to accelerate recovery from mild head-injury and more rapidly return military personnel who have suffered mild closed head trauma back to work (Spector, Reeves, and Kay, 1992).

NNMC

AT the National Naval Medical Center, ANAM batteries are being used to track recovery of function in mild head injury patients undergoing computerized cognitive remediation. Here, the focus is on recovery of ability to sustain attention and concentration for extended periods (Reeves, D., Bleiberg, Spector, & Hegge, 1992).

NRH

Other related research is being conducted at the National Rehabilitation Research hospital and is concerned with quantifying an inconstancy effect often associated with mild head in high functioning patients. In this study (Bleiberg, et al 1994), only tests that are designed for repeated measures and assessment of cognitive processing efficiency have proven sensitive to detection of the more unpredictable but debilitating effects in mild head injury patients. These studies have included more than 44-repeated administrations of ANAM over a four-day period of observation.

Another study (Bleiberg, et al 1993) conducted at NRH demonstrated ANAM's sensitivity to the differential effects of pharmaceutical treatment drugs in a case study with a mild head injury patient. Here, the effects of Dexedrine, Ativan, and Placebo were compared over and extended multiple baseline study. ANAM clearly revealed a "performance-stabilizing" effect of dexidrine, as well as a debilitating effect of Atavin, and the normal erratic and unpredictable pattern of performance associated with the Placebo administrations.

BALTIMORE VA

ANAM is also being used at the Department of Veterans Affairs Medical Center in Baltimore as part of a study of the effects of being wounded with bullets made from depleted uranium. Subjects in this study are veterans from Dessert Storm (Kane, personal communication).

NASA

ANAM has been used in a variety of investigations related to monitoring of cognitive status in both everyday and somewhat more exotic environments. For example, Wood and Holland (1992) (c.f. Reeves, Kane, & Wood, 1992) studied 3 divers who lived for 30 days in an undersea habitat in LaChalupa near Key Largo, FL. The divers lived in undersea quarters similar to those of the currently proposed for the NASA space station. They were given training on the ANAM standard level battery during several practice sessions on 3 consecutive days prior to entering the undersea habitat. They then took a practice and test version of the same ANAM battery, once-a-day, each morning of their prolonged undersea mission. While living in the submersed habitat, the divers had various under water assignments which required them to put on SCUBA gear and leave the habitat. They were not allowed to return to the surface at any time during this 30 day period. Performance on a number of tests tended to stabilize quickly. Performance on these measures quickly improved with practice and then reached relatively stable asymptotic levels. Standard deviations of both reaction time and accuracy measures became less variable over time. Performance on other tests which were presumably more difficult demonstrated more sensitivity to state variables and therefore showed more variability. Test performance mirrored the divers' assigned job performance. They successfully completed all assignments during their 30 day underwater mission.

There was also evidence that the ANAM tests were sensitive to stress producing factors. At one point during the extended mission, divers were required to talk to the press by telephone from the habitat. There was also a camera there to transmit their pictures. They reported feeling anxious about this encounter with the media. On that day, changes in performance efficiency were notable in the ANAM data. This decreased efficiency was noted even on the measures previous which had become highly stabilized over repeated administrations.

Computer-based testing in specialized medical settings.

Certain medical conditions or procedures require continuous monitoring; toxic or metabolic changes, intervention effects, and/or deterioration in the patient's condition must be identified rapidly. Reliability or validity issues that pertain to repeated neuropsychological measurement in general are amplified during shorter or more rapid testing sessions. The logistical constraints imposed by the operating room or special procedures suite demands brevity and portability of testing materials. Computer-based testing offers levels of stimulus control, response timing, and real-time data analysis which permit more sensitive assessment of rapid or subtle changes than are offered by traditional neuropsychological measures.

Normal Pressure Hydrocephalus

The first application to be discussed involves the serial evaluation of patients with suspected normal pressure hydrocephalus (NPH) following lumbar taps of 45-60 cc of CSF. The patients discussed were repeatedly tested using a brief, repeatable test battery employing both traditional and computerized measures. Computerized measures, particularly those emphasizing reaction time and response efficiency appeared sensitive to the relatively subtle cognitive changes that followed LP in a patient with rapid development of symptoms, and did not demonstrate a significant change following LP in a patient with chronic physical and cognitive difficulties.

In one such case we had opportunity to evaluate a 63 year old gentleman who underwent a 48 cc. lumbar tap in an attempt to see whether there might be those changes in cognitive functioning that might predict future success of a shunt. We used a set of test's from an early version of the FAA CogScreen battery which were similar to the tests discussed previously. This battery included a visual matching-to-sample task, sequence comparisons, the Manikin Test (a spatial rotation task), as well as standard neuropsychological tests such as Controlled Oral Word Fluency and verbal and non-verbal selective reminding procedures. We conducted baseline testing prior to LP, allowing the patient to establish a stable level of performance, and then tested 4, 8, 12, 24, 28, 36, 48, and 72 hours after the lumbar puncture.

The general pattern of results from a successful trial generally reflects stable and unchanging accuracy levels following LP. In contrast, reaction time is reduced during the immediate 4-12 hour post-LP period followed by a gradual slowing and return to baseline reaction time levels. The stable accuracy but reduced reaction time reflects what we believe is an improvement of cognitive processing efficiency which is what would be expected in an organic brain disorder marked by slowed rather than impoverished cognitive ability.

Balloon Test Occlusion of the Internal Carotid Artery

Another application of computer-based testing in specialized medical settings involves patients with skull base tumors or aneurysms of the internal carotid artery (ICA). Such patients may require ligation of the ICA. Balloon test occlusion is a low risk procedure that allows testing of the patency of the collateral circulation to the affected hemisphere by temporarily occluding the ICA for 20-30 minutes. We describe the use of computer-based neuropsychological test before, during, and after balloon trial occlusion of the ICA. Typically, assessment has been limited to a brief mental status examination and EEG recording. Changes in neurologic status have been used to indicate the need for premature termination of the study. Our method was designed to provide a more comprehensive evaluation of higher cognitive functioning and potential cognitive outcome.

Three cases are described, selected to demonstrate the use of computer-based neuropsychological procedures in support of interventional neuroradiology. In two cases subtle changes in cognitive efficiency (but not level of performance) were observed during occlusion, and did not predict post-operative changes; in one case changes in response efficiency during occlusion were replicated following surgery.

In one such case the patient was a 32-year-old service member with a giant aneurysm of the left ophthalmic artery. It was anticipated that this lesion would necessitate the ligation of the ICA during surgery. We obtained stable pre-occlusion baseline measures with ANAM along with controlled oral fluency tests. We then conducted a repeated measures assessments at 6, 16, 27, and 36 minutes after a the balloon was inserted into the left internal carotid artery and inflated. We then tested 6, 12, 20, and 40 minutes after deflation because that appears to be the period during which there is a risk of vasospasm. The patient underwent clipping of the aneurysm fourteen days after the trial occlusion; the left carotid artery was ligated during this procedure. Follow-up testing was conducted on post-operative day 6. a total of 20 days or so after the test occlusion.

The general pattern of results showed stable and unchanging accuracy levels with either an increase or a slight decrease (due to continuing practice effects) of reaction time. Performance on the Running Memory subtest proved to be most sensitive to change over the balloon study. Generally, reaction times on this test range between 450 to 650 ms. During inflation we observed a 100 ms increase (i.e., slowing) of reaction time, with no observable residual effect. The patient's running memory test performance was similarly suppressed post-operatively.

Functional Stimulation Mapping of Cerebral Cortex

A third application involves the assessment of language and memory functions during awake craniotomies and temporal lobectomies in seizure surgery patients. Patients are sometimes kept awake during left hemisphere resections to permit functional mapping of "eloquent" cortex, to prevent inadvertent resection of speech or memory-related cortex. We describe the use of computer based procedure with a "heads-up" video display to assess language, memory, and perceptual functions intraoperatively. The procedure is believed to permit a more accurate assessment of higher cognitive functioning than is typically possible with card stock stimuli during the complex and sometimes confusing process of functional brain mapping.

Coronary Artery Bypass Graft

There exist questions within the cardio-thoracic surgical community as to whether certain surgical conditions might affect cognitive or adaptive outcome. One such question regards the advantages of performing open heart surgery under normothermic versus hypothermic conditions. One opinion holds that oxygen requirements are lower when the blood's temperature is 4-5 c lower than normal; another suggests that oxygen perfusion of the brain is more efficient at normal body temperature. In an ongoing study, patients scheduled for CABG were randomly assigned to normothermic and hypothermic conditions. Each patient was administered a form of the ANAM test battery before, 5 days after, and 30 days after surgery. Preliminary results revealed a modest decline in cognitive integrity in the days after surgery, resolving at 30-day follow-up. No significant differences were related to surgical conditions. It was thus decided that there was no necessity to "un-blind" the patient groups, and the study continued.

Other potential clinical applications: ADHD

During his presentation at the AMEDD Course, Dr. Jeff Barth discussed the potential effect of Ritalin on attention and traumatically brain injured adults and the issues concerning repeated measures using computer based testing with reaction time which gives you a real opportunity to look at the short term changes that occur due to medication. Some, such as Ritalin are very short acting, i.e., it has its affect and clears the system in a matter of hours. , such as most of the stimulus that we're talking about. We're also talking about the use of these types of measures, which for the most part have yes or no, same or different, dichotomous response opportunities for the detection for factitious memory and attention deficits in unsubstantiated head injuries.

General Clinical Application Guidelines

The ANAM batteries were not originally designed as stand-alone screening instruments, rather they've been created with the intent of augmenting standard batteries. ANAM provides a means for assessing cognitive processing efficiency in a variety of attention/concentration paradigms that also involve spatial processing, mental flexibility, and working memory.

There are several ways of integrating ANAM into a standard assessment routine. The one we recommend and have found most useful is to begin an assessment session with an orientation/practice battery and then three full administrations of one of the four ANAM batteries. Then during administration of the more traditional tests, re-administer the running memory CPT every ninety minute intervals to track the patients level of efficiency throughout your more comprehensive assessment.

REFERENCES

- Bittner, A. C., Carter, R. C., Kennedy, R. S., Harbeson, M. M., & Krause, M. (1986). Performance evaluation tests for environmental research (PETER): Evaluation of 114 measures. Perceptual and Motor Skills, 63, 683-708.
- Bleiberg, J., Lux, W., Garmoe, W., and Reeves, D. A Procedure for Assessing and Monitoring Cognitive Enhancement and Cognitive Degradation Secondary to Pharmacotherapy. (October, 1992). Archives of Physical Medicine and Rehabilitation.
- Bleiberg, J., Garmoe, W., Cederquist, J., Reeves, D., and Lux, W. (1993). Effects of dexedrine on performance consistency following brain injury: A double-blind crossover case study. Neuropsychiatry, Neuropsychology, and Behavioral Neurology, 6 (4), 245-248.
- Englund, C.E., Reeves, D.L., Shingledecker, C.A., Thorne, D.R., Wilson, K.P., and Hegge, F.W. Unified Tri-Service Cognitive-Performance Assessment Battery (UTC-PAB) I: Design and Specification of the Battery. Naval Health Research Center, San Diego, CA NHRC-TR-87-10, 1987.
- Fleishman, E.A. and Quaintance, M.K. (1984). Taxonomies of Human Performance. Orlando: Academic Press.
- Kane, R.L. (1991). Standardized and flexible test batteries in neuropsychology: An assessment update. Neuropsychology Review, 2, 281-339.
- Kane, R.L. and Kay, G.G. (1992). Computerized tests in neuropsychology: A review of tests and test batteries. Neuropsychology Review, 3, 1-117.

Kay, G. Advances in Computerized Neuropsychological Applications. Physical Medicine and Rehabilitation: State of the Art Reviews, 6 (3), Oct 1992, 565-575.

Kay, G. G., & Horst, R. L. (1990). Effects of aspartame on cognitive performance (DTFA-02-87-C-87069). Federal Aviation Administration.

Reeves, D. L. (1990a). Evolution of a military relevant performance assessment battery. In R. L. Mapou (Ed.), Proceedings of the effects of HIV on military performance: Assessment methodologies Washington, D.C.:

Reeves, D. L. (1990b). Assessment of antihistamine and stimulant drug-effects using the Unified Tri-Service Performance Assessment Battery. 98th Annual Convention of the American Psychological Association Boston:

Reeves, D. L., & Dahms, P. (1990). Sustained flight operations research at the Naval Aerospace Medical Research Laboratory. In D. F. N. a. R. E. Gadolin (Ed.), Sustained/Continuous Operations Subgroup of the Department of Defense Human Factors Engineering Technical Group: 9th Semiannual Meeting Pensacola:

Reeves, D., Kane, R., and Wood, J. (1992). Adapting Computerized Tests for Neuropsychological Assessment. The Clinical Neuropsychologist, 6 ,356-357.

Reeves, D. L., Thorne, D. R., Winter, S. L., Hegge, F. W., & . (1989). The Unified Tri-Services Performance Assessment Battery (UTCPAB): II Hardware/software design and specifications (SR 89-1). Naval Aerospace Medical Research Laboratory, Pensacola, Florida.

Reeves, D., Bleiberg, J., and Spector, J. Validation of the ANAM Battery in Multi-center Head Injury Rehabilitation Studies. Archives of Clinical Neuropsychology. Presented at the 1992__ Annual Meeting of the National Academy of Neuropsychology, Pittsburgh, PA, November 5-7, 1992.

Reeves, D., Kane, R., and Wood, J. Adapting Computerized Tests for Neuropsychological Assessment. Symposium presentation for the 100th American Psychological Association, August 14-18, 1992, Washington DC. The Clinical Neuropsychologist, 1992, 6 (3), 356.

Reeves, D., Schlegal, R., Gilliland, K. and Crabtree, M.. UTC-PAB and the NATO/AGARD STRES Battery: Results from standardization studies. Proceedings of the 1991 Medical Defense Bioscience Review. Aberdeen Proving Grounds, MD, 1991.

Reeves, D.L., Winter, K.P., LaCour, S.J., Raynsford, K.M., Vogel, K., and Grissett, J.D (1991). The UTC-PAB/AGARD STRES Battery: User's manual and system documentation. NAMRL Special Report 91-3. Naval Aerospace Medical Research Laboratory, Pensacola, FL 32508-5700, 1991.

Samet, M., Geiselman, R. E., Zajackowski, F., & Marshall-Miles, J. (1986). Complex Cognitive Assessment Battery (CCAB): Test descriptions. U.S. Army Research Institute, Alexandria, VA.

Santucci, G., Farmer, E., Grissett, J., Wetherell, A., Boer, L., Götters, K., Schwartz, E., & Wilson, G. (1989). AGARDograph #308, Human performance assessment methods (ISBN 92-835-0510-7). North Atlantic Treaty Organization Advisory Group for Aerospace Research and Development, Working Group 12, Seine, France.

Schlegel, R.E. and Gilliland, K. (1990). Evaluation of the Criterion Task Set-Part I: CTS Performance and SWAT Data-Baseline Conditions (Tech. Report AAMRL-TR-90-007). Wright-Patterson Air Force Base, OH., Armstrong Aerospace Medical Research Laboratory.

Schlegel, R. and Gilliland, K. Development of the UTC-PAB normative database. (May 1992). Final Report on AL/CFHP Contract No. F33615-88-D-0532. Office of Military Performance Technology Technical Report.

Schrot, J., & Thomas, J. (1988). Performance assessment battery software (NMRI 88-6). NMRI.

Shingledecker, C. A. (1984). A task battery for applied human performance assessment research (AFAMRL-TR-84). Wright-Patterson Air Force Base: Air Force Aerospace Medical Research Laboratory.

Spector, J., Reeves, D., and Kay, G. (1992). Specialized Applications in Computerized Neuropsychological Evaluation. The Clinical Neuropsychologist, 1992, 356-357.

Thomas, J. R., & Schrot, J. (1988). Naval Medical Research Institute Performance Assessment Battery (NMRI PAB) Documentation (NMRI 88-7). Naval Medical Research Institute.

Thorne, D., Genser, S., Sing, H., & Hegge, F. (1985). The Walter Reed Performance Assessment Battery. Neurobehavioral Toxicology and Teratology, 7, 415-418.

Winter, K. and Reeves, D. Update and Software Demonstration of UTC-PAB, ANAM and AAMS. Presented at the OMPAT Technical Advisory Group Meeting, 06 AUG 1991.

NEUROBEHAVIORAL ASPECTS OF HIV DISEASE AND AIDS:
A PRIMER FOR CLINICAL PRACTICE

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REVIEW OF NEUROBEHAVIORAL FINDINGS IN HIV DISEASE

Asymptomatic Stages

There are few neurodiagnostic findings at the medically asymptomatic stages of disease. MRI, EEG, and neurological examination are generally normal. Nonspecific abnormalities may be noted in cerebrospinal fluid (CSF) analyses, and HIV may be cultured from CSF. There is controversy over whether neuropsychological impairment may occur at these stages. Although some studies have reported no impairment, others have found clinical or subclinical impairment in 20 to 35% of asymptomatic individuals. When present, deficits are noted most frequently in attention, response speed, motor functioning, and learning and memory. Subtle neuropsychological difficulties may be manifested as complaints of attention, memory, and word finding difficulties. With respect to daily functioning, these findings must be interpreted with caution because 1) they do not occur in all HIV-infected individuals, 2) they reflect statistically significant group differences rather than clinically significant individual differences, 3) their progression over time is not yet known, 4) their relationship to HIV-associated dementia (HAD) is not yet known, and 5) their relationship to daily and/or occupational functioning has not been established.

Symptomatic Stages

There is an increased likelihood of neurobehavioral difficulties with progression to the later disease stages. — Abnormalities may be observed on MRI, EEG, evoked or event-related potentials, and neurological examination, although these are most frequent with frank neurological disorder. There is an increased incidence of neuropsychological abnormalities (30 to 50% in symptomatic individuals without AIDS, 50 to 70% in those with AIDS). With progression to AIDS, individuals are at risk of developing HIV-associated dementia, and a variety of opportunistic infections, neoplasia, or vascular complications of the central nervous system (CNS). There are also disorders attributed to the direct effects of HIV. At autopsy, 70 to 90% of people with AIDS have been found to have neuropathological abnormalities. Obviously, frank neurological disorder will impact on daily functioning as it would in any other disease, and will have consequences in the motor, cognitive, and affective realms. As noted below, treatment of these difficulties can

occur within a rehabilitation model. (A selected bibliography of articles on neurobehavioral aspects of HIV and AIDS is available from the author.)

RESEARCH ON THE IMPACT OF NEUROBEHAVIORAL CHANGE ON EVERYDAY FUNCTIONING

There has been little research examining the effects of HIV on everyday functioning. Most studies have examined the impact of disease itself, rather than its neurobehavioral manifestations. Two areas of research, however, have relevance to this issue.

Complaints of Cognitive and Motor Difficulties ("Awareness of Deficit")

Several groups have examined the relationship between complaints of cognitive and motor difficulties and objective neuropsychological performance. Van Gorp and colleagues (1991) found that complaints were related to depression only and not to neuropsychological performance, but subjects were medically asymptomatic and had few deficits. Wilkins and colleagues (1991) found that motor complaints were related to actual difficulties on neuropsychological measures, but cognitive complaints were related only to psychiatric symptoms. Finally, Stern and colleagues (1991) found that cognitive and motor complaints were significantly related to actual difficulties.

In initial work by our group (Mapou et al., 1993), we found that individuals who complained of difficulties were more likely to be neuropsychologically impaired than individuals who did not complain. We also noted that individuals who complained were more likely to report symptoms of depression or anxiety than those who did not complain, but neuropsychological performance and mood symptoms were independent. This suggested that there were two subgroups of individuals with complaints: those who complained due to actual neuropsychological difficulties and those whose complaints reflected only changes in mood. In — preliminary work with a new measure, we partially replicated initial findings of increased cognitive complaints in HIV+ as compared to HIV- individuals. Similar to our original work, we also found that complaints correlated with both neuropsychological performance (more complaints associated with poorer performance) and with self-reported mood state (more reported symptoms of mood disturbance associated with poorer performance (Mapou, 1993, August).

Taken together, this area of research suggests that many HIV-infected individuals can detect changes in neuropsychological function. Thus, complaints of difficulties should be taken seriously and evaluated appropriately, in order to determine the cause and best course of treatment.

Quality of Life (QOL)

With only one exception, studies of QOL in HIV-infected individuals have not examined the impact of neurobehavioral difficulties on QOL. In this one study, Saykin and colleagues (1991) found that subjects with AIDS-related complex reported increased difficulties in attention/planning, motor function, memory, language/reading, emotional control, sexual function, and self-care. Unfortunately, the relationship of these findings to neuropsychological performance was not examined.

Two studies (Ragsdale and Morrow, 1990; Wu et al., 1991) have examined QOL as a function of disease stage. Considering these studies and presentations at the recent conference, Quality of Life and HIV Infection: The Biopsychosocial Dimension (July, 1992; Amsterdam), the following tentative conclusions may be drawn: 1) QOL decreases as disease stage increases, 2) decreases are greatest for people with AIDS, 3) most of the decline in QOL is accounted for by physical decline, 3) there is no relationship of QOL to cognitive status, as reported by subjects, and 5) there is a varying relationship of QOL to mental health status, as reported by subjects, depending upon the study.

ISSUES IN THE WORKPLACE

Although there has been considerable discussion of the impact of HIV in the workplace (e.g., several hundred articles on Medline with the keyword workplace), there has been little direct research on this topic, with the exception of evaluating workplace AIDS education programs. Workplace issues include 1) fear of, and prejudice and discrimination towards people with HIV in the workplace, 3) coping by people with HIV/AIDS, 3) health insurance costs, 4) health safety concerns, especially in medical settings (including workers and patients with HIV/AIDS), and 5) the impact of HIV on occupational performance. This summary will focus only on the last item.

Occupational Performance

There has been much discussion of the possible impact of HIV-associated neurobehavioral changes on occupational performance, especially in positions which are cognitively-demanding or for which there are safety and judgment concerns. These issues were raised when studies of neurobehavioral difficulties in medically-asymptomatic HIV-infected individuals were first reported, and some called for universal HIV antibody testing in the workplace. Barnes and Berti (1989) argued that exclusion of HIV-infected individuals from positions on the assumption of occupational impairment could not be legally justified. An attempt was made by the World Health Organization to lay these concerns to rest (World Health Organization, 1988, 1990), based upon research showing few neuropsychological performance decrements in asymptomatic HIV-infected individuals. Nevertheless, the issue continues to cause

concern, and was raised most recently by the Aerospace Medical Association, in a resolution which called for 1) universal HIV antibody testing for all pilots and 2) medical decertification of those found to be HIV+, regardless of medical status (Special Committee Report, 1992). Several groups, including our own, have responded to this position, arguing that it is 1) unjustified by current knowledge and 2) medical decertification should be based upon clinical evaluation in people with HIV disease, as well as those with other disorders with potential CNS effects.

Several studies are germane to this issue, although much research needs to be done. Downer et al (1991) found that HIV+ subjects who were neuropsychologically impaired were 1) more likely to be unemployed than those who were not impaired and 2) reported being less able to perform their jobs over the prior month than those who were not impaired. A second study (Bohnker, 1992) found difficulties in several aspects of work performance, as rated in performance evaluation reports, prior to HIV diagnosis in Naval personnel. Finally, in preliminary analyses of self-report measures from our own research (Mapou, 1993, August), HIV+ subjects reported significantly lower work productivity as compared to HIV- subjects. In addition, HIV+ subjects reported significantly less satisfaction with their current work and current supervision. Taken together, these findings suggest that HIV disease may have an impact on some aspects of occupational performance and satisfaction. However, the determinants of these difficulties (e.g., medical/physical, psychosocial, or neurobehavioral), the types of positions most likely to be affected (e.g., physical vs. cognitive) and the stage of disease at which problems are most likely to occur remain to be determined.

Employment Status

Several studies have examined the impact of HIV disease on employment status. Metz et al (1990) found that as early as 6 months following an AIDS diagnosis, up to 62% of subjects had ceased full-time work, and after 13 months, 69% were no longer working full-time. Yelin, Greenblatt, Hollander, and McMaster (1991), using structured telephone interviews, found that 86% of respondents worked prior to the first symptom of HIV-related illness, but only 40% worked 2 to 3 years later. Analyses indicated that 50% left work within two years of symptomatic illness, and all had stopped within 10 years. Finally, at the QOL conference referred to above, one study indicated that 50% of people with HIV disease reported worsening conditions in their working lives. Thus, people with HIV disease, particularly those who are symptomatic, are at risk of experiencing changes in their work routines. Early intervention and preparation, however, may help to ease this transition.

Summary of Workplace Issues

Taken together, this preliminary research suggests that 1) there is a significant impact of HIV disease on employment status, especially for individuals who are symptomatic, 2) HIV+ individuals report more cognitive and motor difficulties in general, more difficulties on the job in particular, and less job satisfaction, as compared to HIV- individuals, and 3) there is a possible relationship between actual neuropsychological impairment and employment status. These findings indicate directions for future research, but also suggest targets of intervention directed at 1) improving psychosocial aspects of the work environment and 2) compensating for changes in cognitive and motor function.

TREATMENT APPROACHES

For individuals with purely psychosocial difficulties, traditional psychotherapy and counseling will be useful. More severe psychiatric disturbance may require psychopharmacologic intervention. Guidance for treatment of individuals with cognitive and motor deficits may be drawn from the literature on rehabilitation of individuals who have suffered traumatic brain injury (TBI) and cerebrovascular accidents (stroke). In contrast to such patients, however, individuals with HIV are often aware of difficulties. Thus, they may be more amenable to interventions and use of compensatory strategies. The following suggestions draw upon the rehabilitation literature referenced below, as well as more recent work on rehabilitation of people with HIV disease and AIDS (Mukand, 1991; Pizzi, 1990; Pizzi & Johnson, 1990), also referenced below.

Psychotherapy

Individual psychotherapy can be immensely useful, not only in helping individuals adjust to a life-threatening illness and associated life changes, but also to help them cope with the neurobehavioral difficulties associated with HIV (Dilley, Pies, & Helquist, 1989). Issues of loss of cognitive/motor function and development of compensatory strategies may be addressed. Including partners and significant others may help, when necessary, to provide the structure required for the cognitively-impaired individual. Group psychotherapy can also be an excellent way of sharing one's experience and learning from the experiences of others. Finally, individuals might be encouraged to become involved in a wellness program, which could include exercise, nutrition management, stress reduction, and planned recreational activities.

With regard to occupational issues, counseling may help individuals begin to consider alternatives to current employment including 1) less physically demanding work, 2) part-time employment, 3) consultation, and 4) volunteer work (Pizzi, 1990). Addressing these issues well in advance of the need for change

may help HIV-infected individuals prepare for transitions necessary when symptoms develop.

Psychopharmacology

Psychopharmacotherapy may be a useful treatment adjunct, especially for people at the early stages of disease who are attempting to remain functional. Psychopharmacologic agents must be used carefully, however, with individuals with CNS involvement. Such individuals may react to medications at lower doses, as compared to those without CNS involvement. They are particularly likely to be sensitive to sedating effects of medications and their effects on cognitive and motor function (Cope, 1987; Hriso, Kuhn, Masdeu, & Grundman, 1991; Persico et al., 1991; Storch, 1991).

Anti-depressants. Anti-depressants may be useful for treatment of depression, but must be used with care. Individuals with HIV disease may be overly sensitive to the sedating side-effects of tri-cyclic anti-depressants. MAO inhibitors are to be avoided in those with cognitive deficits, because of the necessary dietary monitoring. Most promising are activating anti-depressants, such as Prozac, because of their rapid onset and potentially beneficial effects on cognition.

Anxiolytics. Although useful to treat severe anxiety states, these medications must be used with caution because of their sedative effects and known deleterious impact on attention and memory. Non-sedating anxiolytics, such as Buspar, may be more useful, particularly for those who have never been treated with anxiolytics previously.

Anti-psychotics. Anti-psychotics should be used only when absolutely necessary. Use should be reserved for treatment of psychotic symptoms, and should be avoided when agitation alone is the symptom. In the latter instance, behavioral techniques and, perhaps, psychostimulants (see below) should be attempted first.

Psychostimulants. In other neurologically-compromised populations, especially with those in whom arousal and attention have been compromised by diffuse brain dysfunction (e.g., TBI), psychostimulants may help to improve alertness and attention. This, in turn, may impact positively on other aspects of cognition and daily function. Increasing alertness may also decrease agitation, in individuals in whom such agitation is due to an inability to process incoming information. Several reports by Fernandez and colleagues (Fernandez, Levy, & Gallizi, 1988; Fernandez et al., 1988; Holmes, Fernandez, & Levy, 1989) suggest that psychostimulants (Ritalin, amphetamine) may be similarly useful in individuals with HIV disease. As a result, many clinicians are using psychostimulants in this population, to treat depression and/or attention and memory difficulties, although controlled studies remain to be done. As with other

medications, low dosages may be sufficient to produce the desired effect.

Interventions to Alleviate Physical Difficulties

The physical aspects may be quite disabling to those who are attempting to continue to work on a full-time basis. Both the disease and associated treatment (e.g., zidovudine) can produce fatigue. Thus, energy conservation becomes essential to maximize work quality. A variety of changes may be implemented including 1) diminishing physical components of work responsibilities, 2) sitting to complete work whenever possible, 3) using flex time, to fit work to times of less fatigue, and 4) reducing work hours if necessary (Galantino & Pizzi, 1991; Pizzi, 1990; Pizzi & Johnson, 1990). Environmental changes may also help conserve energy. These include keeping frequently used materials nearby, and gathering all materials needed for a particular task, prior to beginning the task.

Physical ability may also be maintained through several interventions. One study has suggested that a light exercise program may help maintain motor function in HIV-infected individuals (Spence, Galantino, Mossberg, & Zimmerman, 1990). Pain control techniques, both physical and cognitive, may also be useful. Finally, physical and occupational therapy may help contribute to physical ability maintenance (Galantino & Pizzi, 1991).

Compensatory Strategies and Cognitive Rehabilitation

A variety of adaptive cognitive strategies may be useful to maximize everyday function, in general, and occupational performance, in particular. The literature on cognitive rehabilitation has indicated several areas in which treatment approaches are most likely to be successful. It is clear that the "exercise the brain as a muscle" approach will not lead to generalization and application of skills learned in circumscribed tasks. Thus, with only one exception, use of repetitive paper-and-pencil or computerized tasks will have little or no value. Instead, one may use neuropsychological evaluation, combined with observation, to identify how cognitive/motor deficits may be affecting daily function. In turn, one can then develop compensatory strategies to assist with particular skills. These approaches should constitute only one component of a comprehensive treatment program, including psychotherapeutic interventions. It should be noted, however, that there have been no controlled studies of any of these techniques in HIV-infected individuals.

Attention. Research suggests that this is the one area in which computerized tasks may improve the ability to focus, sustain, and divide attention. This may be due to the similarity between the functions required by computer performance and functions required in other tasks in which one must focus and

sustain attention. Sohlberg and Mateer (1989) have described a program to improve attentional function. A combination of computerized tasks and psychostimulant intervention, yet to be tested in controlled trials in any population, may prove to be effective for these difficulties. Within the workplace, if distractions are a problem, it may be helpful to arrange for the HIV-infected person to work in a less distracting environment. It also may be necessary to reduce multiple demands and have the person focus on only one task at a time.

Learning and Memory. Schacter and colleagues (Glisky & Schacter, 1986) have reviewed the literature and have shown that learning tasks involving repeated practice do not have an impact on functional learning and memory skills. Instead, the skill to be learned must be trained in the specific context where it is to be applied. Compensatory aides, including lists, memory notebooks, and computers, are likely to be most useful for the person with HIV disease, where the issue is maintaining quality of life, rather than rehabilitation. Sohlberg and Mateer (1989) have described a memory notebook which has been useful for individuals with TBI. Such a system may be adapted to the less extensive difficulties encountered in people with HIV disease. What may be most important for these individuals is the acceptance of the need for such aides. It may be difficult for previously high-functioning individuals to accept the fact that they may need to write things down and to keep a "to do" list in order to accomplish their daily goals.

Time Management. Time management may be one of the keys to optimal work performance (Pizzi, 1990; Pizzi & Johnson, 1990). Identifying the best times of day for work will help HIV-infected people focus their work efforts during these time periods. It may also be useful for them to determine the amount of time required for certain work-related tasks, and plan out when they will work on these tasks. Recognizing one's limits may help maximize the quality of the work effort.

Functional Skills. These strategies may be helpful at later stages of disease, when people are no longer working. Observation may be the best way to determine the types of difficulties which individuals are encountering in activities of daily living and independent living skills. One may observe the person as he or she goes through a complete day and attempts to plan a meal, shop, cook, clean, do laundry, balance a checkbook, plan social outings, use public transportation, and complete other daily tasks. Neuropsychological evaluation can help to identify why these functional difficulties may be occurring and, in turn, can suggest ways to intervene. Making use of a Day Timer or other scheduling system can provide structure for the person's day, can minimize "down time," and can insure that needed tasks are completed. Particularly difficult tasks can be organized and structured in a way which minimizes the demands on

novel problem-solving. Particularly for patients with AIDS, structure and predictability may be the best ways to minimize confusion and anxiety.

Behavioral Interventions and Daily Structure. Individuals with AIDS and compromised neurobehavioral function may be unable to use compensatory strategies independently or to structure their daily activities. In these instances, the participation of a partner or significant other, friend, or family member may be essential, if outside placement is to be avoided. Caretakers may help to structure the person's day and to provide the level of social stimulation needed to maintain quality of life, while minimizing frustration. When necessary, behavioral interventions may be used to minimize agitation or other problematic behaviors (McGlynn, 1990; Wood, 1987).

REHABILITATION PROGRAMS

When deemed necessary, a short term, focused rehabilitation program may be helpful (Pizzi & Johnson, 1990; Mukand, 1991). In most instances, this will be needed at a time when individuals are no longer working, but, for some, a rehabilitation program may facilitate return to work following an acute illness. Vocational counseling and rehabilitation may be useful to maximize work potential at these stages (Wehman & Kreutzer, 1991). As noted, a work hardening program, involving environmental management, may also be beneficial.

REFERENCES RELEVANT TO HIV AND OCCUPATIONAL PERFORMANCE

- Barnes, M., John, I., & Berti, C.. (1989, June). Neuropsychological impairment of HIV-infected persons: Legal implications for the workplace. Presented at the V International Conference on AIDS, Montreal, Quebec.
- Bohnker, B. K. (1992). Performance evaluation impairment prior to HIV seropositive diagnosis: A preliminary Navy population-based study. Aviation, Space, and Environmental Medicine, 63, 212-218.
- Downer, P., Velin, R. A., Heaton, R. K., Atkinson, J. H., McCutchan, J. A., & Grant, I. (1991). Neuropsychological impairment in HIV-infected males. Journal of Clinical and Experimental Neuropsychology, 13, 73(abstract).
- Mapou, R. L. (1993, August). Characterizing self-reported occupational difficulties in HIV disease. Paper presented as part of a symposium, "Neuropsychology and quality of life in HIV disease," at the 101st annual convention of the American Psychological Association, Toronto, Ontario, Canada.

- Mapou, R. L., Kay, G. G., Rundell, J. R., and Temoshok L. (1993). Measuring performance decrements in aviation personnel infected with the human immunodeficiency virus. Aviation, Space and Environmental Medicine, 64, 158- 164.
- Mapou, R. L., Law, W. A., Martin, A., Salazar, A. M., and Rundell, J. R. (1993). Neuropsychological performance, mood, and complaints of cognitive and motor difficulties in individuals infected with the human immunodeficiency virus. Journal of Neuropsychiatry and Clinical Neurosciences, 5, 86-93.
- Metz, S., Fox, R., Odaka, N., McArthur, J. C., McArthur, J. H., & Saah, A. (1990, June). Employment status of men diagnosed with AIDS in the Baltimore MACS. Presented at the VI International Conference on AIDS, San Francisco, CA.
- Ragsdale, D., & Morrow, J. R. (1990). Quality of life as a function of HIV classification. Nursing Research, 39, 355-359.
- Special Committee Report. (1992). HIV positivity and aviation safety. Aviation, Space, and Environmental Medicine, 63, 375-377.
- Stern, Y., Marder, K., Bell, K., Chen, J., Dooneief, G., Goldstein, S., Mindry, D., Richards, M., Sano, M., Williams, J., Gorman, J., Ehrhardt, A., & Mayeux, R. (1991). Multidisciplinary baseline assessment of homosexual men with and without human immunodeficiency virus infection: III. Neurologic and neuropsychological findings. Archives of General Psychiatry, 48, 131-138.
- Van Gorp, W. G., Satz, P., Hinkin, C., Selnes, O., Miller, E. N., McArthur, J., Cohen, B., Paz, D., & Study, t. M. A. C. (1991). Metacognition in HIV-1 seropositive asymptomatic individuals: Self-ratings versus objective neuropsychological performance. Journal of Clinical and Experimental Neuropsychology, 13, 812-819.
- Wilkins, J. W., Robertson, K. R., Snyder, C. R., Robertson, W. K., Van der Horst, C., & Hall, C. D. (1991). Implications of self-reported cognitive and motor dysfunction in HIV-positive patients. American Journal of Psychiatry, 148, 641-643.
- World Health Organization. (1988). Report of the consultation on the neuropsychiatric aspects of HIV infection. Geneva: Author.
- World Health Organization. (1990). Report of the second consultation on the neuropsychiatric aspects of HIV-1 infection. Geneva: Author.

Wu, A. W., Rubin, H. R., Mathews, W. C., Ware, J. E., Brysk, L. T., Hardy, W. D., Bozzette, S. A., Spector, S. A., & Richman, D. D. (1991). A health status questionnaire using 30 items from the medical outcomes study: Preliminary validation in persons with early HIV infection. Medical Care, 29, 786-798.

Yelin, E. H., Greenblatt, R. M., Hollander, J. & McMaster, J. R. (1991). The impact of HIV-related illness on employment. American Journal of Public Health, 81, 79-84.

SELECTED REFERENCES ON TREATMENT AND REHABILITATION

Cope, D. N. (1987). Psychopharmacology [Topical issue]. Journal of Head Trauma Rehabilitation, 2(4).

Dilley, J. W., Pies, C., & Helquist, M. (Eds.). (1989). Face to face: A guide to AIDS counseling. San Francisco: AIDS Health Project, University of California-San Francisco.

Fernandez, F., Adams, F., Levy, J. K., Holmes, V. F., Neidhart, M., & Mansell, P. W. A. (1988). Cognitive impairment due to AIDS-related complex and its response to psychostimulants. Psychosomatics, 29, 38-46.

Fernandez, F., Levy, J. K., & Galizzi, H. (1988). Response of HIV-related depression to psychostimulants: Case reports. Hospital and Community Psychiatry, 29, 38-46.

Gallantino, M. L., & Pizzi, M. (1991). Occupational and physical therapy for persons with HIV disease and their caregivers. Journal of Home Health Care Practice, 3, 46-57.

Glisky, E. L., & Schacter, D. L. (1986). Remediation of organic memory disorders: Current status and future prospects. Journal of Head Trauma Rehabilitation, 1(3), 54-63.

Holmes, V. F., Fernandez, F., & Levy, J. K. (1989). Psychostimulant response in AIDS-related complex patients. Journal of Clinical Psychiatry, 50, 5-8.

Hriso, E., Kuhn, T., Masdeu, J. C., & Grundman, M. (1991). Extrapyrarnidal symptoms due to dopamine-blocking agents in patients with AIDS encephalopathy. American Journal of Psychiatry, 148, 1558-1561.

McGlynn, S. (1990). Behavioral approaches to neuropsychological rehabilitation. Psychological Bulletin, 108, 420-441.

Mukand, J. (Ed.). (1991). Rehabilitation for patients with HIV disease. New York: McGraw-Hill.

Persico, A. M., di Giannantonio, M., Mattioni, T., Lestingi, L., Zeppetelli, E., & Tempesta, E. AIDS and psychiatric disorders: Guidelines for psychopharmacological treatment. Journal of Sex Education and Therapy, 17, 167-184.

Pizzi, M. (1990). The model of human occupation and adults with HIV infection and AIDS. American Journal of Occupational Therapy, 44, 257-264.

Pizzi, M., & Johnson, J. (Eds.). (1990). Productive living strategies for people with AIDS. New York: Harrington Park Press.

Morse, P. A. (Ed.). Brain injury: Cognitive and prevocational approaches to rehabilitation. New York: Tiresias Press.

Sohlberg, M. M., and Mateer, C. A. (1989). Introduction to cognitive rehabilitation. New York: Guilford Press.

Spence, D. W., Galantino, M. A., Mossberg, K. A., & Zimmerman, S. O. (1990). Progressive resistance exercise: effect on muscle function and anthropometry of a select AIDS population. Archives of Physical Medicine and Rehabilitation, 71, 644-648.

Storch, D. D. (1991). Caution with use of tricyclics in patients with AIDS. American Journal of Psychiatry, 148, 12.

Wehman, P. H., & Kreutzer, J. S. (1991). Models of vocational rehabilitation [Topical issue]. Journal of Head Trauma Rehabilitation, 6(3).

Whyte, J. (1986). Attention and memory [Topical issue]. Journal of Head Trauma Rehabilitation, 1(3).

Wood, R. Ll. (1987). Brain injury rehabilitation: A neurobehavioral approach. Rockville, MD: Aspen Publishers.

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THE NATIONAL HEALTH CARE REFORM INITIATIVE:
THE FUTURE IS NOW

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As early as the Truman Administration proposals were circulating in Congress about some form of national health insurance. By 1980, Congressional testimony focused on competition among providers as a cost control measure. However, health care costs as a function of the Gross National Product (GNP) were comparatively small and none of these proposals were passed into law. However, in the past two to three years great concern was raised as the health care budget exceeded the rate of inflation and approaches seventeen percent of the GNP (compared to 12 percent in 1989). At its present rate of growth, by the year 2000, the country's health bill will reach one trillion dollars. Furthermore, it is projected that all business profits will be consumed by the health care costs of corporate employees by 1997. With the exception of parts of Germany, the United States is the only country in the world that has its health insurance system sponsored and paid by business or industry. Against this background of health care Armageddon, many proposals for some form of national health have been offered. The two most popular bills circulating around Congress are Senator Mitchell's Healthcare America (S1127) and Congressperson Russo's Universal HealthCare (HR1300). Both bills are markedly similar and included mental health benefits for both in- and outpatient, cost sharing, quality assurance and inclusion of psychologists as providers. They differed on the administration of the plan, the use of a managed care paradigm and how the health care was to be financed. With the election of President Clinton, S1127 and similar Democratic proposals have been put on a hold as health reform was a major plank in the Democratic Platform. However, the Russo Bill, since he lost his bid for re-election, has been reintroduced by Republican Representative McDermott (the — psychiatrist from Washington) and Senator Wellstone of Minnesota with about 50 co-sponsors and proposes a single payer and no managed competition but lacks clarity on how costs will be contained. The Clinton proposal for National Health Reform is promised now by June, 1993. While Hillary Rodham Clinton is a member of the task force, Tipper Gore appears to be the point person concerned with the mental health component. She has a Master's Degree in Psychology and spoke at the dinner given by APA at the State Leadership Conference this year. More recently, Mrs. Gore was permitted to appoint one person to the very powerful national provider advisory panel. She picked Lance Lawrence, Ph.D., a past-president of the Tennessee Psychological Association and a strong advocate for psychology.

MANAGED COMPETITION

Managed competition is the most recent concept in the national health care reform debate. Proponents claim that managed competition will improve efficiency, save money, and provide more benefits to more Americans. Managed competition theoretically reaches these end points by combining the regulation of health care with free market forces. Critics, however, say managed competition is an untested construct that may do nothing to guarantee either affordable and/or universal health care coverage. The Clinton Administration, however, has embraced the managed competition concept and endorsed a minimal mental health benefit.

There are two components to the managed competition model: Accountable Health Plans (AHP) and Health Insurance Purchasing Cooperatives (HIPCs). AHPs are a combination of insurance companies, hospitals and providers designed to be very similar to HMOs, PPOs, and other managed care entities. AHPs will offer insurance and health care as a single package and will be judged on their overall effectiveness by as yet unnamed criteria. AHPs will offer a basic plan and may offer more comprehensive coverage with greater co-payments. AHPs must include copayments and deductibles in their plan. AHPs will also be exempt from all state mandates on benefits.

HIPCs are a way for small businesses to group together to share risk and reduce administrative costs associated with health insurance. In a sense, HIPCs function as health benefits managers for small companies as all businesses with less than 100 employees will be required to join. HIPCs will be established within certain geographic regions and would negotiate with AHPs on behalf of consumers and businesses. That is, HIPCs would solicit competitive bids among the super-HMOs(AHPs) and manage the plan's enrollment and premium payments, and advertise health plans offered by HIPCs. Thus managed competition is created.

Additionally, some plans require small and medium size companies to join a HIPC but large companies may self insure or buy directly from AHP. It has been argued that the ERISA exemption gives these large, self insured companies an unfair competitive advantage by permitting them to alter or modify employee benefits at any time. Indeed, the U.S. Supreme Court has recently made this finding a matter of law. Something will need to be done with ERISA; the President could legislate parity or expensive sanctions to companies who offer less. Proponents of managed competition say it is the best way to maintain the current public and private health insurance industry while guaranteeing universal coverage of health care; but consumers may have less say in their selection of providers in the HIPC superHMO.

It is not even clear that such competition is technically feasible and there is the risk that a multi-tiered health care system could develop. Further, there is no guarantee that managed competition will actually bring costs under control. We, as psychologists, must be prepared to advocate for our rightful position regardless of the configuration of the managed competition. It is not only in our best interests, but in the best interest of the citizens we serve.

LATE BREAKING NEWS

Dr. Donna Shalala, the Secretary of the Department of Health and Human Services has recently told APA staffers that mental health will be included in the President's plan and that she believes that there are other systems of delivering mental health care other than a medical model.

APA is hiring three field organizers to work with targeted states on Health Care Reform Initiatives at the grass roots level. The work will include letter writing, regular meetings with state associations and staff, op-ed pieces, site visits, letters to editors, press conferences, actively coordinating with coalitions.

Health care advisers are considering a plan to bar patients from suing their doctors (to decrease defensive practice and costs), but could sue their health plan instead. Physicians spend \$5.6 billion on malpractice premiums. The idea is called "enterprise liability." A recent study estimated that \$7.2 billion is spent each year on defensive medicine.

The last estimate for the cost to finance National Health is a staggering \$100 to 150 billion above present spending on health.

ERISA AND NATIONAL HEALTH

On labor Day, 1974, President Ford signed into law the Employee Retirement Income Security Act (ERISA) culminating ten years of congressional hearings and study. The law was designed to protect the retirement income of employees who had private company pension plans which had been poorly regulated by inconsistently enforced state laws. To accomplish the goal of protecting the economic security of retired employees, ERISA specifically pre-empted all related state laws:

(T)he provisions of this act (ERISA) shall supersede any and all state laws in so far as they may now or hereafter relate to any employee benefits plan (covered by ERISA). SCC. 514 (a), 29 U.S.C. 1144 (a)

To the extent that an employer offers a benefit plan and characterizes it as a trust rather than insurance, they can claim ERISA exemption from state insurance laws that mandate benefits as well as providers. Thus, as many of us know, psychologists' Freedom of Choice Acts are not enforceable when a corporation is self-insured.

National health will have to address the issue of self-insured companies who claim the ERISA exemption. Not to be so will give these companies a competitive and fiscal advantage over other national health plans that have certain minimal standards. For example, a national health basic package might include well baby care. However, benefits plans set up under the ERISA legislation could decide not to offer that service to their beneficiaries.

National health is an ideal time to remedy this loophole in what is otherwise good pro-labor legislation. There would seem to be at least three possible remedies. First, ERISA language could be changed to add teeth in the law that would penalize self-insurers for omitting certain classes of diseases or services. Not only would this require the opening of ERISA law but it would require extensive negotiation over what are or what are not covered services/diseases. A second option would be to have federal regulations that would govern the health insurance segment of the market that is covered by the ERISA exemption. The difficulty here, however, appears to be timeliness in that federal regulations must be published and there must be an open time for comment and review and the effective date of the regulation could be years from the date the regulations were proposed. The third alternative would be to repeal the exemption clause that pre-empted all related states statutes. By doing so, all mandated benefits and providers would be included in all insurance plans be they third party payer or self-insured. This proposal may require the greatest initial effort but has the widest appeal for psychology because of its simplicity and clarity. It could well be the most time efficient way to integrate ERISA into the national health plan. Let us not forget this loophole in the National Health debate.

ADJUSTING TO MANAGED CARE OUTPATIENT REVIEW

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Under managed care there is a contractual model between the managed care company and the provider of mental health services. The provider is paid for care by the managed care company as long as the care meets the criteria for medical necessity and/or the limits of the coverage provided by the patient's plan. The mental health coverage that are administered by managed care companies varies significantly even within the same managed care company because the coverage provided to the patient is most often determined by the plan the patient or the employee/employer participates. For many plans, there are limits of coverage such as the number of sessions or types of diagnosis or treatment covered. The amount of coverage may vary from 5-15 visits a year to as many visits that are medically necessary until the patient has consumed their lifetime \$25,000 outpatient benefit.

Often the limits of coverage and the benefit plan provide for returning the patient to the functioning level that the patient was at prior to the current crisis. Thus, several types of coverage and policies might not support long term characterological re-development via intensive or long term therapy. Instead these policies may encourage short term therapy or time effective therapy. This is quite different from having the patient come into and start the therapeutic work and the work continues and is finished when both the patient and provider acknowledge that the therapeutic work is complete. Under the managed care model care is not provided as long as it does not violate ethical standards and fits the practice pattern of the mental health provider. Although managed care appears more and more a part of mental health practice, some providers may need to decide if they want to and if their practice style works within these coverage limits.

The focus of this article, however, is not on a discussion of the positive and negative aspects of managed care, or the factors in deciding to participate or not as a managed care provider but on how to move through the managed care program effectively if you decide to participate. The focus is on how to provide the information that is typically needed during the review process and how to answer the most commonly asked questions even before they are requested via a telephonic review. Providing accurate and the needed information to the managed care company in the outpatient treatment report benefits the provider by preventing the need for follow up phone calls, telephonic review for medical necessity or returned outpatient treatment reports because of missing information.

When an outpatient treatment report is submitted for case management to the managed care company, it is first logged in and date stamped certifying when it was received. Then it is reviewed by a case manager on a number of factors. The managed care company which has the largest share of the market evaluates four factors. These four factors are medical necessity, fit of the diagnosis to the reported symptoms, progress during the course of treatment, and the match of the recommended treatment both to the diagnosis and the areas of reported dysfunction.

The first factor is medical necessity. To meet the medical necessity criteria the case manager ascertains if the symptoms are acute enough and significant enough that the patient is rendered impaired in specific areas of functioning due to a DSM-III-R diagnosis. This is a two step evaluation. The first step of this evaluation is made by comparing the practitioner's and the case manager's evaluation of Global Assessment of Functioning (GAF). The second step is comparing the practitioner's and case manager's ratings of functioning in occupational, educational, marital/family, interpersonal/social, and self maintenance. These scores of the global and specific areas of functioning are used to determine several somewhat objective measures of level of functioning and subsequently medical necessity. The medical necessity decision is multilevel. The first medical necessity decision is if there is any care medical necessary. That is if any care is medical necessary. The second decision if some care is medically necessary is what is the level of care (inpatient/partial hospitalization, residential treatment, structured outpatient or outpatient care) that is medically necessary. If the level of care is outpatient, the medical necessity decision is frequency of treatment. Each of these medical necessity decisions are determined by examining the amount of dysfunction in the global and specific areas of functioning.

The second factor is diagnostic fit. The case manager determines if the reported DSM-III-R **diagnosis** of all five axes fits with the current nature, severity and duration of **symptoms**, the **behavioral descriptions** and the **mental status**. The case manager evaluates if the number and types of the symptoms, behavioral descriptions and the mental status meet the criteria for the diagnosis. The case manager evaluates if these behavioral descriptions are consistent with the diagnosis or might suggest an alternative diagnosis.

The third factor is progress during the course of treatment. The case manager tracks the reported functioning overall and in the areas of occupation, education, marital/patenting/family, social, self-maintenance. The case manager evaluates progress over the course of treatment by comparing these scores as reported in outpatient treatment reports over the course of treatment.

The fourth factor is treatment match. The case manager evaluates what the provider has recommended as interventions to determine if these interventions are specifically aimed at improving areas of impairment in the areas of occupation, education, marital/partnering/family, social, and/or self-maintenance. The case manager also evaluates if the diagnosis and the recommended treatment plan match. Inappropriate or incomplete treatment plans not focused on improvements in the above mentioned areas are reason for further scrutiny. This scrutiny often results in a telephonic review to insure that inappropriate or incomplete treatment planning and implementation does not result in suboptimal treatment or treatment failure. The lack of pharmacological interventions or the appropriateness of the psychopharmacologic management plan are also evaluated. If medications are prescribed the primary therapist is often held accountable of knowing what medications and what dosage are being taken and addressing medication non-compliance (in addition to the prescribing physician). The use of community resource group and collateral programs will often be strongly encouraged if applicable.

In summary, by providing the necessary information in the outpatient treatment reports the mental health professional can save time and hassles. These energies will not only help in cutting down needless telephonic reviews but may result in higher ratings of the therapist by the managed care companies as they continue to implement profiling of providers and either increased referrals to "good" providers or decreased, if any, referrals to providers who fail to accurately provide the desired information.

FORENSIC PSYCHOLOGY
APPLICATIONS OF MILITARY MENTAL HEALTH LAW
TO A CASE OF CHILD SEXUAL ABUSE

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Military psychologists are confronted with an increasing demand for psychological expertise in cases of child sexual abuse. The recent revision of TM 8-240 (Military Mental Health Law) provides an introduction to the issues facing clinicians who apply psychological principles in forensic settings. TM 8-240 and its application for the military clinical psychologist is reviewed. A case of child sexual abuse in which the conviction was successfully appealed based on the erroneous admission of psychological testimony is examined with regard to the use of "psychological profile evidence" in these cases.

Military forensic psychology involves the application of psychological methods and principles to the determination of mental competency and responsibility. In addition, the opportunity to testify as an expert witness offers the psychologist many challenges which are different from those found in usual clinical practice. As an introduction to the interface between mental health issues and the law, the Department of the Army has published Technical Manual Number 8-240 entitled "Military Mental Health Law" (Department of the Army, 1992). The main elements of this manual and the use of the psychologist as an expert witness in a case of child sexual abuse will be presented.

MILITARY MENTAL HEALTH LAW

The practice of forensic psychology in court-martial — proceedings is similar to that found in civilian courtrooms. There are, however, some differences contained in the Military Rules of Evidence (MRE), Rules for Court-Martial (RCM), and Uniform Code of Military Justice (UCMJ) which may affect the forensic evaluation. The application of clinical information to the improper legal standard as defined by military law can result in an appeal and retrial (Department of the Army, 1992). Mental responsibility and competency are two areas which the clinician must evaluate within the context of the applicable military legal standards.

In order to determine mental responsibility and competency, RCM 706 provides for the convening of a sanity board (MCM, 1984). The board may be composed of physicians or psychologists. One member of the board must be a psychiatrist or a psychologist.

The sanity board is ordered by the court-martial convening authority and must answer the following questions concerning mental responsibility as defined by RCM 916 (K) (1):

1. At the time of the alleged criminal conduct, did the accused have a severe mental disease or defect?
 2. What is the clinical psychiatric diagnosis?
 3. Was the accused, at the time of the alleged criminal conduct and as a result of such severe mental disease or defect, unable to appreciate the nature and quality or wrongfulness of his or her conduct? (MCM, p. II-83)
- This military standard of responsibility is identical to that stated in the Insanity Defense Reform Act (1986) which is utilized by many civilian courts.

Rule 909 of the Manual for Court Martial addresses the issue of competency to stand trial. Mental responsibility refers to the accused's mental state at the time of the alleged criminal conduct. Competency involves the accused's present mental state. The sanity board must render an opinion concerning the accused's ability to cooperate and participate in his/her own defense and the ability to understand the nature of the legal proceedings and charges. These volitional and cognitive components are essential elements of the competency evaluation (Department of the Army, 1992). TM 8-240 recommends that the competency evaluation assess these components in nine areas of behavior: appraisal of legal defenses, unmanageable conduct, ability to relate to an attorney, ability to develop legal strategies, basic understanding of military justice system, understanding charges and penalties, assisting counsel, rebuttal of claims, ability to testify, and self-defeating behavior. It is important to note that the legal system presumes that an individual is competent to stand trial. It is the forensic mental health evaluation that determines if this presumption is correct.

A third major area of forensic psychology discussed in TM 8-240 is expert testimony. The purpose of the expert witness is to educate the trier of fact concerning his/her field of professional knowledge as it relates to the legal issues present in the case. In this role, the expert is not limited only to directly observable facts. Opinions based on professional knowledge and experience as they pertain to the case are essential elements of the testimony. Consequently, the forensic psychologist must have the necessary clinical knowledge and expertise as well as the understanding of how this information can be applied in the courtroom. Although the determination of the admissibility of testimony rests with the judge, it is important to know the types of clinical information which comply with the Military Rules of Evidence.

TM 8-240 provides a set of guidelines which can help prepare the clinician who is unfamiliar with providing expert testimony.

The first and perhaps most important element of expert testimony is the pretrial preparation. After completing a thorough forensic evaluation, the process of preparing to testify must begin. Pretrial conferences with the attorney should establish the content of testimony, possible cross-examination questions, and special requests such as the presence of the expert during other testimony. The pretrial conference can also challenge the attorney's belief that the psychologist will be testifying for a particular side in the case. The forensic psychologist is testifying for the court.

Additional guidance provided by TM 8-240 includes the following:

1. Use of notes. It is best to testify from memory. Thorough pretrial review of the case and anticipating possible questions is usually sufficient to prepare most clinicians. If there is a large amount of psychological test data, it is recommended that the written report be readily available.
2. Practice qualifying. Before the expert witness is allowed to testify, he/she must be determined by the judge to be qualified. The attorney will ask about professional education, experience, research, and other areas relevant to the testimony. A current vitae can expedite this process and can be used as a basis for qualifying the witness.
3. Present effective testimony. Avoid the use of professional jargon. The role of the expert is to educate the court. The manner in which the testimony is presented can be as important as the content of the testimony. Responses to questions should be directed to the jury. Although certain references to the scientific literature may be required, the forensic psychologist should not allow the testimony to become a review of the literature.
4. Cross-examination. Cross-examination places the expert in the position of having his/her professional opinion challenged. This action is not taking place in an atmosphere of collegial exchange. Attorneys generally attempt to impeach an expert's testimony due to inconsistency or a lack of credibility. An honest recognition of the limits of one's professional knowledge can demonstrate integrity rather than ignorance.
5. Limitations of testimony. The psychological expert does not provide opinions of law. Testimony should be limited to the subject matter within the scope of the expert's training. It is important that the expert avoid using his/her knowledge of human behavior as a basis for declaring the accused "sane" or "insane." These are legal conclusions which the court determines after hearing the testimony of the expert witness.

TM 8-240 contains the basic information necessary to prepare the psychologist who must interface with the military legal system. Although it is not the responsibility of the forensic psychologist to know the legal precedents concerning

admissibility of psychological testimony, it is helpful to have a general understanding of those content areas which have been problematic in other cases. The following case study illustrates this point.

USE OF PSYCHOLOGICAL EXPERT TESTIMONY IN A CASE OF CHILD SEXUAL ABUSE

The case of U.S. vs. Banks (36 M.J. 150, CMA, 1992) is presented to emphasize the importance of the Military Rules of Evidence (MRE) as they pertain to expert testimony. The accused soldier was convicted by general court-martial of raping and sodomizing his seven year old step-daughter. The conviction was appealed to the United States Court of Military Appeals which overturned it based on the erroneous admission of psychological profile evidence presented by the government's forensic expert.

The essential element in the case, as in all sexual abuse allegations, was credibility. The defendant denied the allegation and the prosecution presented six expert witnesses to prove its case and to enhance the credibility of the step-daughter. The defense presented one forensic psychologist in an attempt to rebut the government's case and to present evidence which questioned the step-daughter's allegation. The defense counsel had intended to utilize the expert's opinion in four areas.

The first area was the prosecution's use of interview techniques which the defense claimed pressured and coerced the child. The second element was a review of the professional literature and studies on the normal size of a seven year old child's vagina. The third element of the defense's expert testimony was the rebuttal of the prosecution's claim that the alleged victim was experiencing sexual abuse accommodation syndrome (Summit, 1983). The defense also intended to use the expert testimony of their psychologist concerning the results of the accused's Minnesota Multiphasic Personality Inventory (MMPI).

The use of prosecution and defense experts to address these issues has the potential to reduce the trial to a debate among experts. In order to control this debate, the Military Rules of Evidence, Manual for Courts- Martial, United States, 1984 (MCM, 1984) provide the guidance to assist military judges in deciding the admissibility of expert testimony. MRE 403 and 702-705 establish four criteria for the admissibility of expert testimony:

1. The witness must be qualified by virtue of knowledge, skill, experience, training, or education.
2. The information upon which the expert bases an opinion must have sufficient facts to make it relevant to the case.

3. The expert witness must limit the testimony to the area of his/her expertise.

4. The potential prejudice created by the expert's testimony must be less than the probative value of the testimony.

It is important to note that MRE 704 specifically precludes the expert from testifying about the guilt or innocence of accused.

In U.S. vs. Banks, the trial counsel elected not to use the videotape of the alleged victim which contained the reported coercive interview techniques. This action rendered the defense's argument moot. The government provided expert medical testimony by two physicians concerning normal prepubertal vaginal size. However, the defense's expert was not allowed to testify on this issue because he was not a physician. The defense's expert witness concluded that the results of the accused's MMPI did not present the profile of a pedophile. The military judge ruled that such testimony was inadmissible. The remaining issue for expert testimony was the presence of sexual abuse accommodation syndrome.

Summit (1983) proposed the child sexual abuse accommodation syndrome as a model to explain the reactions of children who have been sexually abused. The model describes five responses to sexual abuse: 1) secrecy, 2) helplessness, 3) entrapment and accommodation, 4) delayed, unconvincing disclosure, 5) retraction of the allegation. This syndrome was described by the prosecution's forensic psychologist in U.S. vs. Banks. This testimony included the expert's opinion about risk factors present in the families of sexual abuse victims and the presence of these factors in the accused's family. The defense counsel objected to the testimony. However, the military judge overruled the objection.

U.S. vs. Banks was appealed to the U.S. Court of Military Appeals based on this testimony. It was the majority opinion of the court that the prejudicial effect of the psychologist's testimony was greater than its probative value. The court also noted that MRE 702 does not require that one possess a medical degree in order to provide expert testimony on a physical condition and its etiology. Consequently, not allowing the defense's psychologist to testify concerning vaginal size was not consistent with MRE 702.

The successful appeal of U.S. vs. Banks was due to the judge's decision to allow the use of psychological profile information. Although the admissibility of testimony is determined by the judge, psychologists who provide expert testimony should avoid presenting information which can be seen as evidence of guilt or innocence based on the accused having similar behaviors or characteristics of persons who have committed a crime.

CONCLUSIONS

MT 8-240 serves as an excellent introduction to forensic psychology in the military. Military psychologists who serve on sanity boards or provide expert testimony in court-martials should be familiar with TM 8-240.

Psychological expert testimony should not present information which seeks to determine evidence of guilt or innocence based on a pattern of behaviors or characteristics which correspond to persons who have committed a crime.

FOOTNOTE

The opinions expressed in this paper are those of the author and are not intended to represent the official views of the Department of the Army or the Department of Defense.

REFERENCES

Department of the Army (1992). TM 8-240 Military Mental Health Law, U.S. Government Printing Office, Washington, D.C.

Insanity Defense Reform Act of 1986, 20, 18. U.S.C. (1986).

Manual for Courts-Martial, United States (1984). U.S. Government Printing Office, Washington, D.C.

Summit, R.E. (1983). The child sexual abuse accommodation syndrome, Child Abuse and Neglect, 7, 177-193.

U.S. vs. Banks. 36 M.J. 150 (CMA, 1992).

AN UPDATED PSYCHOLOGIST FIELD CHEST:
FROM ANTIQUATED TO SOPHISTICATED

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One predominant complaint of many psychologists assigned to a Division Mental Health Service or TOE unit is that the assigned psychologist field chest is outdated and fails to meet the needs for the provision of psychological testing. The current field chest found on all the TOE/MTOE lists contains a number of psychological measures that have over time been revised, and further, could be replaced by more sophisticated, sensitive, and efficient measures. Many psychologists find that they must make their own substitutions and additions of equipment and tests so as to make their field chest useful during a deployment. These comments were supported by psychologists participating in Operation Desert Shield and Operation Desert Storm (Stephens, 1991).

During the preparations for deployment of psychologists in support of Operation Restore Hope and the Sinai Peacekeeping Rotation, an updated Psychologist Field Chest was created through coordination with the Office of the Surgeon General and COL Gregory Laskow (WRAMC). The revised field chest is equipped with revised and updated psychological and neuropsychological tests and screening measures (including a number of measures written in Spanish), biofeedback and relaxation equipment, a notebook computer and printer, and computer scoring programs for a number of psychological and neuropsychological tests (see Figures 1 and 2).

These sets were and still are being field tested. CPT Southwell (assigned to the 10th Mountain Division deployed to Somalia for Operation Restore Hope) received one of the field chests, which was not as complete as the set sent to the 528th Medical Detachment, Fort Bragg. His initial impressions were that the updated field chest far surpassed the "old" chest. He found the wide variety of psychological and neuropsychological tests and the biofeedback and relaxation equipment very useful. He found the computer scoring programs equally useful and allowing for more proficiency in generating results and reports. The apparent deficits of the new field chest were that the actual field container was impractical due to its size, weight and bulkiness, preventing ease in mobility. One recommendation to avert this difficulty is to package all equipment between two of the old field containers, possibly one used for storage of testing materials and the other for the computer, printer, and biofeedback equipment. Furthermore, he found that his particular field chest lacked necessary scoring and interpretation manuals for a number of the tests. He recommended that all kits contain

necessary manuals as well as one general reference, particularly for neuropsychological testing. Finally, a significant benefit was the inclusion of a notebook computer in the kit. However, there were difficulties in maintaining this equipment in a sandy and dusty environment. His recommendation was to find appropriate protection for the computer that could be used in a deployment in a variety of climates and environments.

In conclusion, the updating of the psychologist field chest has been long awaited and is a beneficial move towards changing a field chest that is outdated and ineffective. Furthermore, the tests and equipment included in the new field chest are not all encompassing and not necessarily the "best" tests to use. The ultimate decision on the administration of psychological testing and the choice of what measures to utilize falls on each individual psychologist. The updated field chest provides a positive and useful alternative to the already existing field chest. Furthermore, there are apparent strengths and weaknesses in the new field chest, however the changes are a significant improvement. Further field testing of the new chests are necessary to provide additional perceptions and input on how to improve on the changes initiated.

REFERENCES

Southwell, G. (1993). Personal conversations. Walter Reed Army Medical Center, Washington, D.C.

Stephens, Katherine J. (1991). Summary of lessons learned in providing mental health care to soldiers during Operation Desert Shield and Desert Storm. Proceedings, 1990 AMEDD Clinical Psychology Short Course.

Figure 1

"Old" Field Chest

MMPI with manual and scoring stencils

Thematic Apperception Test

Rorschach Inkblot test with scoring sheets

Bender-Gestalt Visual Motor Test

WAIS

Developments in Rorschach Techniques, volumes I and II (Kloper)

Psychoanalytic Interpretation in Rorschach Testing (Shafer)

Figure 2

"New Field Chest"

Symbol Digit Modalities Test
Shipley Institute for Living Scale
WRAT-R Kit
Stroop Neuropsychological Screening Test
Wisconsin Card Sorting Test
Personal History Check List (PHC)
Mental Status Check List (MSC)
MMPI II Kit
Biofeedback Relaxation Set
Alcohol Use Inventory
SCL-90-R with Hispanic Version
MCMHI Kit with Hispanic Version
Aphasic and Sensory Perceptual Deficits in Adults
Trailmaking Test
Beck Depression Scale
California Verbal Learning Test
WAIR-R Neuropsychological

IBM Assessment Software for:
 Personal History Check List Adult Computer Report
 Memory Assessment Scale
 Mental Status Check List
NCS Scoring "Dongle" System
RIAP-2 Rorschach Computer Scoring Program
Notebook computer with printer (recommended)
Dual cassette recorder

USE OF AN INNOVATIVE TECHNIQUE TO DECREASE ANXIETY AND
DISTRESS IN TRAUMATIZED CHILDREN: SONG-WRITING AS
A THERAPEUTIC STRATEGY

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A number of techniques have been developed as therapeutic strategies for use with young children who have experienced traumatic incidents. Psychotherapy which involves primarily talking about the incident and the victim's emotional response may not be effective strategies with young children who are not very verbal. Effective and well accepted tactics include incorporating the trauma in a story and providing a favorable ending (Richard Gardner's Mutual Story Telling Technique, 1971); allowing the child to repetitively engage in play which focuses on the trauma; use of art therapy or drawing techniques which allow the child to ventilate feelings through pictures; incorporating tactile and kinesthetic therapeutic elements through movement therapy to express hostility, anger, a need for nurturance, a sense of control over the environment, and poetry therapy. These are vehicles for therapeutic change and healing, a way of easing the trauma and allowing the child to grow and develop in a healthier mode.

All of these approaches are valid. All are considered viable treatment strategies. They encourage the child to use a variety of stimulus modalities, taking advantage of the child's own strengths and interests, to develop a relationship with the therapist and help resolve the emotional conflict and distress.

While dance, poetry and stories, drawing, and play are all effective ways to gain therapeutic rapport and enter the world of the traumatized young child, it is of interest that singing or song-writing are not currently accepted therapeutic techniques.

The song production technique described in this paper involves the child and therapist (and, at times, the parent) working together to produce a song. The child then uses the song to calm and reassure himself/herself by singing the song in a repetitive fashion. Whenever the anxiety occurs - while riding in a car, through play time, in bed at night - the song can be sung. Singing can be done out loud or silently in one's own mind.

In reviewing relevant literature, there is little mention of "song" or "singing" in the psychological literature. While music therapy has been provided frequently, the music and songs have typically not focused directly on the trauma. There is an extensive literature on poetry therapy (Antebi, 1986; Chavis,

1986; Gladding & Hanna, 1982; Hallowell & Smith, 1983; Houlding & Holland, 1988; Kobak & Neinken, 1984; Morrice, 1983; Morrison, 1987; Silverman, 1986; Snyder, 1983; Welch, 1982) but poetry is not exactly the same as song.

Poetry therapy in a group setting has been used as a treatment for sexually abused children. Mazza, Magaz, and Scaturro (1986) effectively encouraged these children to individually write poetry and involved the group in a collaborative poetry writing experience. Similarly, Gladding (1992) offered poetry therapy to children in a school counseling program and Langosch (1987) included poetry therapy in a therapeutic milieu day camp setting. Bowers (1992) and Glaister and McGuinness (1992) recently confirmed that therapeutic drawing was helpful with survivors of chronic trauma and sexual abuse. Poetry therapy in a group setting has been used as a treatment for sexually abused children. In a group setting, role plays have been used effectively with sexually abused children (Celano, 1990). Corder, Haizlip, and DeBoer (1990) offered a group for sexually abused children that combined game playing, structured art, role play, and "chants and cheers."

One might consider a song to be a poem set to music. Jones (1987) addressed the origins of poetry and song. He indicates that Virgil is reported to have said "Do not commit your poems to pages alone; sing them, I pray you." Masserman (1986) similarly wrote a paper on poetry as music.

The current technique might be described as poetry written and sung to a tune in a repetitive manner with the goal of decreasing anxiety and distress.

Children may develop and use the song writing technique on their own. It is not unusual for children to create their own songs while in the process of playing. The songs they create may directly or indirectly address their concerns, their feelings of loneliness, anxieties about abandonment, fears of abuse, distress and sadness. Similarly, children often sing about their feelings of happiness and elation.

In the media - especially, movies, and tv - songs are often used as self- help and self-affirmation techniques, as a means to familiarize the listener with the personality, motivation, stresses, and situation of the singer. For example, in *Gypsy*, a lonely child rejected by her mother realizes that she is "second best," not as pretty as her sister, not as graceful, not as skilled in dance or theatre arts. In a self-nurturing manner, she sings to herself a song entitled "Little Lamb."

Similarly, many adult characters sing songs of self affirmation, self expression, assertiveness, optimism, and elation.

Think, for example of the assertiveness and self nurturance of the song "I'm Gonna Wash That Man Right Outa My Hair." The song "Just a Spoonful of Sugar Makes the Medicine Go Down" describes a positive approach to the distressing experience of taking foul-tasting medicine by mouth. "Give a Little Whistle," "I Whistle a Happy Tune," "Everything's Coming Up Roses," "Good Morning, Good Morning," "High Hopes," "Bye Bye Blackbird," "I'm Singing in the Rain" all express optimism, elation, and joy. Similar "jingles" have been developed to enhance mood and sell a wide variety of products.

The singing paradigm tends to be effective for several reasons. The act of singing a song repetitively has a hypnotic component. The hypnotic aspects of poetry were first addressed in 1930 in a book entitled "Hypnotic Poetry" by Snyder. More recently, Snyder (1983) addressed the trance-inductive aspects of poetry. As the trance deepens, the potential for responsive involvement is enhanced.

There is also a component of relaxation. It is difficult for the child to remain anxious while singing a song. Singing out loud tends to alter breathing patterns; deeper breathing facilitates relaxation. The child's attention shifts away from the anxiety. It is difficult to remain intensely agitated while singing.

The child uses the song to express his or her feelings. Just as an individual can use writing or artistic productions for self-expression, writing a song and singing it are self-affirming, and self-expressing activities. These tend to be natural and spontaneous behaviors for young children. It is not necessary to teach the child to engage in this activity, only to direct the song-writing toward a therapeutic end.

In writing the song, the child tends to focus on the most relevant and critical elements that affect him or her. The child is more capable than anyone else in determining what he/she needs, what words will be calming, what tune fits the mood. The child nurtures himself/herself by producing the song and using it to provide calming. It empowers the child to heal himself/herself, to develop songs as he/she needs them, and to use the therapeutic song when the need arises.

Song-writing also gives the therapist and the parents an opportunity to encourage self-expression in the child, to reinforce the child when he/she independently cares for his/her own needs, to applaud the child's creativity and insight.

This technique can also be used in a children's group. Encouraging the children to sing each other's therapeutic songs allows them to nurture each other and to accept nurturance from their peers. Offering group therapy for young traumatized

children which incorporates song writing and singing can enhance the effectiveness of the group. The group can also collaborate to write a therapeutic song.

DESCRIPTION OF THE TECHNIQUE

The child is told that he or she will write a song that will help with the bad feelings. This is one of the first therapeutic tactics; it clearly communicates to the child that effective help is being offered and the problem can be resolved.

The song does not need to focus directly on the anxiety or distress. It might focus on the feeling that Mommy and/or Daddy love and care for the child and will be there to help, that the child's tummy will stop hurting, that everything will be ok, that even the most awful situation cannot last forever. The song might focus on an animal character that had the same problem as the child but found an effective solution, a technique incorporating Richard Gardner's story telling techniques set to a melody.

Typically, a very simple tune is suggested to the child, along with a theme and an approach. If needed, the child is given choices as to what the song might say and what might be most helpful. Examples of songs developed by other children can be provided; the child may wish to modify an existing song.

The child is usually asked to sing the song several times with the therapist before the end of the session and is given a copy of the song in written form or on tape. The parent is often included, offering that parent a chance to learn the song and to encourage and support the child. The child and parent are told that practicing the song through the day will help the child to master both the song and the distressing feelings.

Children generally love to perform. Allowing the child a chance to perform his/her song individually before the end of the session can be self-affirming and empowering.

At the time the child becomes distressed or anxious when away from the therapist's office, the parent can suggest to the child that the song will be helpful. In addition, the parent can ensure that the child practices the song when relaxed and comfortable, as a way of inducing comfort and decreased anxiety at moments of distress.

The suggestion can also be made that the child and parent write a therapeutic song together. The child-parent song-writing team is instructed to write the song and call the therapist to sing the song and describe their progress. The benefit to this approach is that the child-parent team is empowered and taught to use an effective technique. The technique can be used in the

future for a variety of situations.

CASE I

Brenda is a five year old female child who reports molestation by her father and her father's friend beginning at a young age. She describes the molestation as incorporating tactics to frighten her, intimidate her, and maintain her silence. She indicates that the father threatened her, her younger sister, and her mother. The father no longer has contact with Brenda; their relationship was severed a year ago. Brenda continues to experience anxiety at bedtime. she recalls that her father said that there would be someone watching her through her window and that he would send someone to break into the house and take her away.

A number of techniques have been discussed with the mother, however the child's fearfulness persists and sleep is very difficult. The suggestion was made that Brenda write a song to help decrease her anxiety and lull herself to sleep. In the therapy session, a song was created. During the drive home, the mother again gave Brenda support and encouragement, and they sang the song together several times.

The song that Brenda developed in the therapist's office was:

If he knocked on my door, I'd wash him right out and I'd get a microphone and tell him that I don't want to see him any more. All my bad thoughts will go away. And soon the happy thoughts will come into my mind.

Brenda and her mother were seen by the therapist three weeks later. The mother indicated that Brenda had been interested in singing the song during the drive home, but she reported that Brenda did not sing the song or express anxiety after that.

During the session, Brenda indicated that her anxiety was greatly decreased. To her mother's surprise, Brenda indicated that she had been singing her song by herself. She had modified the song over the three weeks to fit her needs and express her feelings. She sang:

All my bad thoughts will go away. And soon the happy thoughts will come into my head. I'll play with my dolls after dinner. And I won't be scared anymore.

CASE II

Craig is a five year old boy who is in the middle of an intense power struggle between his divorced parents. He has lived with his mother for two years since the divorce, however the father still tries to convince him that his mother is an awful person and that Craig should live with the father. The father

has made a variety of extremely hostile and abusive statements to and about the mother. Craig loves his mother and father, but tends to identify with his father.

In the therapy sessions, it is explained to Craig that he can love both his mother and his father. The angry feelings that his father expresses are his own; Craig doesn't have to experience or express the same feelings. He is given permission to love his mother and to tolerate his father's anger and the hostile language directed toward the mother without the need to defend his mother in the father's home. Craig acknowledges that he has been trying to hate Mom as a way of feeling closer to Dad and gaining acceptance from Dad, but he is extremely distressed and conflicted. He is given permission to feel and express loving feelings toward Mom when he is with her and to remain quiet when he is with Dad and Dad expresses his hostility toward Mom. The father is unwilling to involve himself in therapy. Craig indicates that his father would cut off contact if supervised visitation were imposed, and the only alternative is to sever the contact between father and son. Craig desperately loves his father and wants to maintain relationships with both his mom and dad.

The goal of Craig's song is to allow him to leave the hostility at his father's house, to behave in a loving manner toward his mother, to decrease his extremely hostile behavior and acting out directed against the mother, to maintain a sense of loyalty to each parent, and to allow Craig a method to maintain both relationships. Craig wrote and sang this song as a way to help himself deal with the feelings, planning to sing his song upon his return to the mother after his visits with Dad:

Angry feelings go away. All you do is make me unhappy.
Angry feelings make me fight with Mom and say bad things
and cause trouble. Get out, get out, get out! Goodbye,
angry feelings.

This song was effective for Craig. The mother reminded him to sing the song upon his return from Dad's home as a way of helping Craig to allow his anger to dissipate and to communicate her belief that he could control his feelings. It facilitated Craig's re-entry into the mother's home and provided both Craig and the mother a specific tactic to deal with Craig's hostility, avoiding identification of Craig as a "bad boy."

CASE III

Susie is a four year old girl and the focus of a custody dispute. Her mother and father separated and Susie remained with her mother. The mother was extremely angry at the father and encouraged Susie to steal items out of the father's home and to bring them to the mother. She made insulting statements about the father and his fiance. Susie was torn between the father and

mother. The mother began to punish Susie for what she perceived as her lack of faithfulness and her loyalty to the father. The punishment mounted to the point of abusiveness. Custody of Susie was then moved from the mother to the father. During her visits to her mother, Susie began to experience her fearfulness and distress somatically. In spite of the fact that the mother was closely monitored and the physically abusive behavior had discontinued, Susie still experienced intense stomach aches, vomiting, and tearfulness.

The following song, written by Susie and the therapist, proved to be very helpful in controlling the anxiety and distress:

Little tummy, little tummy, you're going to be ok.
Your daddy loves you and your Beckie (father's fiancée)
loves you. Little tummy, little tummy. Everything is going
to be ok.

The song was highly effective in decreasing Susie's symptoms, and she often used the song when her father was driving her to the mother's home for visitation.

CONCLUSIONS

The song writing technique can be a very effective addition to the therapist's "bag of tricks" in dealing with trauma and anxiety in the young child. It is surprising that this technique is not included in the literature on psychological treatment. Singing is a natural behavior for humans and clearly, it is used as a self-help technique, a means of developing feelings of rapport with others, and a method of self-affirmation in many, if not most, cultures.

The traumatized child feels helpless and powerless. Providing the child with a technique like this that he/she can implement on his/her own is particularly effective. It minimizes the dependence on the therapist; it teaches the child that he/she is creative and capable of nurturing and healing himself/herself. In the three cases cited, song-writing was effective in decreasing anxiety and distress and empowering the child to cope effectively with very upsetting situations.

Enjoyment of performing - a natural element in the growth and development of a child - can be effectively used as a self-help technique. While self-help strategies have been focused on adults, they can be effective for children, using the therapist as a consultant. When a calming, reassuring approach is needed, the song-writing strategy works well.

Other therapists are encouraged to use this strategy in a variety of settings - schools, therapy groups, and individual sessions.

REFERENCES

- Antebi, E. (1986). Poetry therapy: a means of increasing wholeness. The Arts in Psychotherapy, 13(2), 235-240.
- Bowers, J.J. (1992). Therapy through art. Facilitating treatment of sexual abuse. Journal of Nursing and Mental Health Services, 30(6), 15-24.
- Celano, M.P. (1990). Activities and games for group psychotherapy with sexually abused children. International Journal of Group Psychotherapy, 40(4), 419-429.
- Chavis, G. (1986). The use of poetry for clients dealing with family issues. The Arts in Psychotherapy, 13(2), 121-128.
- Corder, B.F., Haizlip, T., & DeBoer, P. (1990). A pilot study for a structured time-limited therapy group for sexually abused pre-adolescent children. Child Abuse and Neglect, 14(2), 243-251.
- Gardner, R. (1971). Therapeutic communication with children, the mutual story telling technique. New York: Science House.
- Gladding, S. & Hanna, K. (1992). The use of poetic processes in school counseling. The School Counselor, 10(22), 110-114.
- Glaister, J.A. & McGuiness, T. (1992). The art of therapeutic drawing. Helping chronic trauma survivors. Journal of Psychosocial Nursing and Mental Health Services, 30(5), 9-17.
- Hallowell, E. & Smith, H. (1983). Communication through poetry in the therapy of a schizophrenic patient. Journal of the American Academy of Psychoanalysis, 11(1), 133-158.
- Houlding, S. & Holland, P. (1988). Contributions of a poetry writing group to the treatment of severely disturbed psychiatric inpatients. Clinical Social Work Journal, 16(2), 194-200.
- Jones, J. (1987). Poem and hymn tunes as songs. In Morris R. Morrison (Editor). Poetry as therapy. New York, New York: Human Sciences Press, 128-131.
- Kobak, D. & Neinken, E. (1984). Poetry therapy with hospitalized mentally ill patients. Journal of Group Psychotherapy, 37(3), 134-136.

Langosch, D. (1987). The use of poetry therapy with emotionally disturbed children. Special Issue: Poetry in Therapy. American Journal of Social Psychiatry, 7(2), 97-100.

Masserman, J. (1986). Poetry as music. The Arts in Psychotherapy, 13(1), 61-67.

Mazza, N., Magaz, C., & Scaturro, J. (1987). Poetry therapy with abused children. Special Issue: Childhood Sexual Abuse. The Arts in Psychotherapy, 14(1), 85-92.

Morrice, J. (1983). Poetry as therapy. British Journal of Medical Psychology, 56(4), 367-370.

Silverman, H. (1986). Poetry therapy. The Arts in Psychotherapy, 13(4), 343-345.

Snyder, E. (1983). Trance-inductive poetry: a brief communication. The International Journal of Clinical and Experimental Hypnosis, 31(1), 1-7.

WHEN ATTORNEYS CONTRIBUTE TO EMOTIONAL AND BEHAVIORAL PROBLEMS
IN THEIR MENTALLY ILL CLIENTS: THE DRAWBACKS OF INCORPORATING
SOCIALIZATION IN A PROFESSIONAL RELATIONSHIP

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In the psychiatric inpatient setting, patients who have been civilly committed by the courts have episodic contact with their attorneys. The attorney who is retained or appointed to represent the patient interacts with his/her client in the patient's setting - the psychiatric ward - and in the courtroom. This paper is a description of a small number of situations in which the attorney-client relationship lapsed beyond the usual boundaries and as a result, the relationship became maladaptive, resulting in an escalation of behavioral problems on the part of the patient. The staff's view of the unique role and special skills of the attorney and their reluctance to intervene can make it difficult to reverse this maladaptive process and to intervene, decreasing the patient's dysfunctional patterns of behavior.

Typically, the attorney enters the patient's home ward and asks to be directed to the patient. He/she converses with the patient to determine what approach to the civil commitment is desired by the patient, reviews the chart, and may talk with the nursing staff or other members of the treatment team about their view of the patient's needs for continued treatment. The attorney will introduce himself/herself to the patient, explain his/her role, and will question the patient as to his/her desire to leave the facility and live outside the hospital environment. Specific plans for release and available resources - finances, family members, residences - are discussed.

It is the role of the attorney to represent the patient's wishes in the courtroom. If the expert witnesses - psychologists, psychiatrists, social workers, mental health professionals - and lay witnesses - family members, apartment managers, neighbors - are unable to provide sufficient data to warrant further commitment, the patient will be released by the court.

Typically, the attorney will have only a few relatively brief contacts with the client. In a few hours, the attorney can develop a case or gain a sense that there is no effective case to be made that the patient should be released. The attorney may try to negotiate with the hospital staff as well as family members; he or she may also try to facilitate the development of a discharge plan by conferring with landlords and case managers.

After the court hearing, if the patient was committed, the relationship usually diminishes substantially and there is typically minimal contact until the time of another court hearing. If the judge has not ordered a less restrictive placement, review date in court, or other specific aspect of the placement or treatment, there is little reason for the attorney to meet with the patient.

In some cases, attorneys have formed relationships with their mental health clients. When the roles becomes one of attorney-friend, the patient may display particular problems as a result of the sense of empowerment resulting from this relationship. In addition, the hospital staff may be intimidated by the attorney, with a resulting reluctance to intervene if a maladaptive relationship develops between the patient and attorney.

CASE I

Billy Evans is a developmentally disabled 64 year old male patient with an IQ of 62. He is a resident of a state hospital. While Mr. Evans was previously a resident of a facility for developmentally disabled individuals, that facility stabilized its population at a low level and will not accept additional patients. The goal of the facility for developmentally disabled individuals is to close its doors.

The attorney tried to force the DD facility to accept Mr. Evans as a resident. In spite of the fact that many individuals testified that it would be in Mr. Evans's best interests to return to the DD facility and receive specialized treatment there, the state refused to transfer Mr. Evans. When the judge ordered Mr. Evans to be placed in the state DD facility, the state refused and appealed the matter.

At this time, Mr. Evans remains in the state hospital. He wants to move to the DD facility and he recalls enjoyable memories of his earlier stay there. The legal case between the state and Mr. Evans' attorney persists. Typically, Mr. Evans does not attend court as his attorney maneuvers through the legal system, trying to enforce the judge's order. However, Mr. Evans' attorney maintains close contact.

Mr. Evans is unable to understand the complex case. He only knows that he wants to go to the DD facility and his attorney has told him that he is trying to have him move there. The attorney visits Mr. Evans approximately once a week and the focus of their discussions has been Mr. Evans' desire to move to the DD facility.

Mr. Evans has had a long history of inappropriate behavior. He has been managed with behavioral techniques and all staff work to offer consistency in their management strategies. While Mr.

Evans had stabilized at a higher level prior to his court hearing, he became intensely agitated over the issue of remaining in the hospital.

Mr. Evans approaches the nursing desk to ask that he be permitted to call his attorney approximately four times each morning. He has started to call his attorney "cousin." Staff do not feel that they can deny Mr. Evans these phone calls and will often make the calls for Mr. Evans and then hand the phone to him. Typically, Mr. Evans reaches the attorney's secretary and speaks in an incomprehensible and incoherent manner, making demands, expressing his desire to leave the hospital, tearful, overly emotional, and verbally abusive.

His phone calls to his attorney's office have become a central pastime in his life. Mr. Evans never accomplishes his goals in these phone calls and they have an agitating effect on him. If staff do not permit him to make the calls immediately, he will often threaten to kill them, will talk about burning down the hospital, and will swear loudly at staff members, and sometimes will hit patients and staff.

All of these behaviors have been in Mr. Evans' repertoire for a length period of time, however the frequency of these behaviors increased greatly after the attorney's interaction with Mr. Evans began. The attorney's visits with Mr. Evans are relatively calm and the two of them sit quietly and talk in a private area. However, after the attorney leaves, Mr. Evans often acts out in a hostile manner.

He tries to spend much of his time standing at the nursing desk, asking when he can call his attorney, asking staff when the attorney will come to see him or will call him back. In spite of the emphasis on consistency, it is difficult to gain control over Mr. Evans' agitation and hostility. The phone contacts and individual sessions with the attorney tend to maintain Mr. Evans in an agitated state.

He feels special and important, perceives a special form of empowerment originating from his relationship with the attorney, and this fuels his hostility toward staff. Staff feel that it would be inappropriate to request that the attorney discontinue these visits. The attorney has been told of the effect of his visits on the patient, but he views the state and its refusal to transfer Mr. Evans as responsible for Mr. Evans' agitation and behavioral problems. It is his view that he can offer to Mr. Evans a unique form of contact and socialization, including the promise of hope of release from the state hospital environment.

If Mr. Evans displayed this kind of increased agitation in response to visits with a family member or friend, that visitor would be asked to limit visits. Mr. Evans would be asked if he

wanted to continue these visits and his increased agitation would be point out to him. Efforts would be made to ensure that he was calm and staff would intervene immediately at any indication of escalating agitation.

Staff view the conferences with his attorney as "off limits" and do not want to interfere. The relationship between the patient and his lawyer is perceived as private and staff do not want to be accused of interfering with Mr. Evans' private legal consultations or denying him his legal rights.

Solution.

This pattern of behavior continued for approximately three months. When the staff finally decided to talk to the attorney about the increasing difficulties with Mr. Evans' behavior, the attorney was quite willing to participate in any interventions that would help. He was invited to a treatment planning meeting, and was quite agreeable to several suggestions made by staff.

The attorney was asked to tell Mr. Evans that he did not want him to call his office any more, that the calls would not result in the attorney visiting Mr. Evans more frequently, and that the attorney would not respond to the calls. The attorney continued to visit Mr. Evans on a regular basis.

While this certainly did not resolve all of Mr. Evans' behavioral problems, it did result in improved behavior around the nursing desk. Staff became less intimidated about telling Mr. Evans that he could not call his attorney and clarifying the fact that the attorney did not want him to make these calls. When Mr. Evans could no longer call his attorney, the attorney's name was no longer used in a threatening manner with staff. The attorney and staff found that they could communicate effectively about Mr. Evans, exchanging suggestions, without interfering with his legal rights or denying him these valuable conferences with his attorney.

CASE II

Mrs. Ames is a woman in her 80s diagnosed with bipolar mood disorder, hospitalized on a 180 day court commitment. She was placed in a nursing home, but returned after she became very argumentative, uncooperative, and refused to allow another woman to move into her bedroom. The nursing home refused to tolerate this behavior.

In the hospital, Mrs. Ames would take items from other patients, hit at them if they came close, was extremely demanding of staff time, and loved to converse with staff. It was rare for her to talk with other patients; her tendency was to 'trap" staff members in her monologues and it was difficult for staff to escape. At times, she positioned her wheelchair so that it was impossible for them to escape. Mrs. Ames was sarcastic and

became hostile if she was not provided with attention.

While attorney Ben Lynch did not represent her at her last court hearing, he represented her in the past and became familiar with her. He became a friend to Mrs. Ames and began to visit her on a regular basis. Mrs. Ames talked about him constantly. She carried around a photograph of him and his family, knew many of the details of his failed marriage, and talked at great length about his father's health problems. She often expressed her view that Mr. Lynch is a very handsome young man, bragged to staff members about the special things he did for her, and was quite preoccupied with this relationship.

Mr. Lynch is a pleasant young man who seemed to enjoy his relationship with Mrs. Ames. He viewed his role with Mrs. Ames as her friend and pointed out that he is not representing her. However, his role in the hospital placed him in a unique situation and staff did not want to intrude in his visits with Mrs. Ames, nor were they comfortable in telling him how she was using the relationship.

Mr. Lynch had keys to the locked ward and he did not sign in the visitor's book when he came to visit. Staff did not approach him to ask him to sign in as a visitor; attorneys generally do not sign the visitors' book. He made some demands on staff and asked for a few special favors for Mrs. Ames. This is not unusual for family members and friends. When Mr. Lynch made requests on her behalf, Mrs. Ames glowed with pleasure.

Mrs. Ames perceived herself to be in a special category in the hospital. She believed that other patients were dirty and stupid and she would often exhibit verbally and physically abusive behaviors directed at them. She was noncompliant with medication and was unwilling to comply with hospital recommendations and treatment plans. Her relationship with Mr. Lynch seemed to fuel her sense of entitlement and empowerment; the special relationship with her attorney contributed to her view of herself as superior to others in her environment.

Solution.

She was transferred to a ward for higher functioning psychiatric patients. On this ward, Mrs. Ames' behavior improved substantially. When she was around higher functioning patients, she modeled her behavior after them. She began to take medication on a regular basis, something that she had refused to do earlier.

Of interest was the fact that the staff on Mrs. Ames' new ward developed a very positive view of the attorney. As her behavior improved, she discontinued her constant talk about him. She became quiet and private, displaying appropriate appreciation of her relationship with Mr. Lynch. The staff were grateful for

the efforts Mr. Lynch made on her behalf; he made several trips into the community to obtain her possessions from a nursing home and to resolve financial issues for her; this relieved the staff from having to perform these tasks.

Mrs. Ames is now about to be released and she continues to enjoy her relationship with Mr. Lynch in an appropriate and private manner. The difficulties earlier in her hospitalization were clearly the result of her mental disorder, however the attorney's private life became a focus of her attention. Discussion by staff with the attorney about her tendency to focus on him and share private details of his life with everyone around would have been appropriate far earlier in their contact.

CASE III

Mr. Elm is a young man of 23 who was previously treated at an inpatient child facility. He was receiving a number of diagnoses, and has been viewed as suffering from attention deficit hyperactivity disorder, schizoaffective disorder, and narcissistic personality disorder. Most of his life has been lived in institutional care. His extensive institutionalization has structured his personality, and he continues to be highly manipulative and unable to cope without the structure of the inpatient facility.

Mr. Elm has often acted out in a highly inappropriate manner. For example, he told a female patient that her breath was "like an open sewer;" she slapped him and he responded by slugging her. He tends to become very assaultive, loud, and disruptive. He assaulted a staff member, resulting in a serious injury. The staff member was off of work for an extensive period of time as a result of the injury.

Mr. Elm participates in a civil commitment proceeding every 180 days. One of the attorneys, Mr. Gooding, has taken a special interest in Mr. Elm. The relationship between Mr. Elm and Mr. Gooding is an unusual one, and this has adversely affected Mr. Elm's behavior on the ward.

Staff have noticed that when Mr. Gooding stayed away from Mr. Elm, Mr. Elm's behavior improved. Mr. Elm perceives the attorney's presence as a promise that he will be able to leave the facility in the near future. On the ward, staff try to avoid discussions of discharge with Mr. Elm. They try not to provide Mr. Elm with specific target dates for release because he responds with increased behavioral problems and inappropriate demands.

His relationship with Mr. Gooding has expanded to include other defense attorneys who also represent hospital patients in civil commitment proceedings. His major relationship, however, remains with Mr. Gooding.

Mr. Elm has manipulated the attorneys at promising to agree to the entry of the court orders. When a patient agrees in this manner, the attorney is relieved of a great deal of work; there is no court hearing. The attorneys know that Mr. Elm will probably never leave the hospital on a permanent basis.

The patient has developed a view of the attorneys as family; the hospital staff have become his "bad parents," and the attorneys have become his "good parents." The attorneys do not believe that Mr. Elm can successfully adjust to life outside the inpatient setting. One of Mr. Gooding's goals is to improve life for Mr. Elm. He does this by taking Mr. Elm on outings, bringing him to his own home, providing dinner, and even allowing Mr. Elm to stay at his own home overnight.

When the attorney is on Mr. Elm's ward, he will occasionally see Mr. Elm and will casually suggest that they have lunch together (e.g. "how about doing lunch today?"). Mr. Elm happily accepts the invitation, but will then respond with anxiety, disruptiveness, and an unwillingness to eat the hospital lunch served at noon. On one occasion, Mr. Elm vomited because he was so upset. The attorney then arrived around 2:30 P.M., with no understanding of the impact of his behavior on the patient.

The attorney became Mr. Elm's primary source of emotional sustenance. After having contact with his attorney, Mr. Elm developed the expectation that the contact would continue and his frustration mounted when there was a delay in contact.

Mr. Elm's primary goal has been to achieve his release from the hospital and then, to maintain extensive contact with his attorney, possibly living in the attorney's home. When he perceives staff to be interfering with this goal, he responded with rage, threats, and assaultive behavior.

Mr. Gooding has been unintentionally supporting Mr. Elm's unrealistic expectations and discharge plans, which are out of the capabilities of this patient. Mr. Elm has been out of the facility for short periods of time and he has been able to control his behavior for these brief periods. For these brief periods, the attorney and his family have been able to tolerate Mr. Elm's behavior. However, upon Mr. Elm's return to the facility after a visit, Mr. Elm's frustration has mounted to assaultiveness and other inappropriate actions.

Solution.

Through involvement of the attorneys in the treatment team meetings and extensive consultation between staff and attorneys, the situation improved. When they began to work together to provide Mr. Elm with opportunities to practice independence and

social skills, Mr. Gooding became more appreciative of the staff's interventions, and the hospital staff came to appreciate Mr. Gooding's interest in this patient.

DISCUSSION AND CONCLUSIONS

While staff appropriately exert control over maladaptive and destructive relationships between patients and visitors, the patient-attorney relationship is viewed by hospital staff as out of their control. Staff are careful to avoid intruding on the relationship. The attorneys alter the nature of their relationships with patients, by offering extensive socialization and efforts to improve the quality of the patient's life, difficulties can occur. It is critical that attorneys be aware of the effect of their behavior on the patient.

When the attorney functions within a traditional professional mode, these difficulties are minimized. However, when the relationship incorporates social elements (or when the patient believes that the attorney's motivation is social) the patient may come to depend upon the relationship. Because of the unique and powerful role that an attorney can play in a client's life, this relationship may become a major focus. The patient may alter his/her behavior and may view himself/herself as special and empowered. The sense of entitlement and empowerment can contribute to difficulties for the patient in relationships with others in the hospital environment.

It would be viewed as inappropriate and possibly unethical if a physician, psychologist, social worker, nurse, recreation therapist, housekeeper, or other staff member formed a personal and socially oriented relationship with a patient in this setting. Among psychiatrists and psychologists, there are specific prohibitions against such a dual relationship.

Hospital employees are generally not familiar with guidelines for attorneys and are unlikely to intervene because of their perception of attorneys. While attorneys are generally very capable in their ability to interact with well-functioning individuals, their unique role can serve to reinforce and encourage inappropriate behavior and attitudes on the part of hospitalized psychiatric patients and they may not recognize this without feedback from staff members.

Inviting the attorney to participate with the treatment team to develop treatment plans, using the attorney as the patient's representative, obtaining the patient's permission to share information with the attorney about his/her behavioral and emotional difficulties, and ensuring that the attorney understands the potential adverse impact of the relationship on the patient may contribute to resolution of difficulties. Most attorneys have had relatively little education in the mental

health field; offering education in the management of mentally ill individuals with behavioral problems and including the attorney as another therapeutic agent on the treatment team may be a necessary and helpful element in resolving these concerns.

DIVISION OF BEHAVIORAL SCIENCE: TOGETHER YET SEPARATE:
A NEW ORGANIZATIONAL STRUCTURE OF MENTAL HEALTH RESOURCES
FOR A NEW AGE

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Pressures to continue separate departments and services for Clinical Psychology, Psychiatry, Social Work, Community Mental Health, and Drug and Alcohol will continue along with counter pressures to consolidate and coordinate all mental health services due to shortage of personnel, growing CHAMPUS bills, and span of control issues for Command. The paper presents the model initiated and operationalized at MAMC which successfully meets both of these pressures, retaining autonomy yet coordinating mental health assets.

Briefly, a consortium of all the mental health activities is organized into a Division of Behavioral Science, governed by a Board composed of the Chiefs of the Agencies. All actions effecting mental health are brought to the Board for decision. For example, the specific assignment of a new 91G to one of the services is decided by the Board through consensus, thus eliminating the need for the Chief of Personnel to make the decision after having been "lobbied" by all the different Mental Health Chiefs. A new, small Mental Health Coordination Section is created for the use of all the agencies to handle common tasks (e.g., Fire Prevention Plan, CPR training). Also, in order to avoid fears of factional rivalries and/or loss of autonomy, the "chairman of the Board," the Chief of the Division of Behavioral Science is on a rotational basis among the Chiefs of Clinical Psychology, Psychiatry, and Social Work.

Six months of operations have indicated a reduction in rivalries, increased cooperation, elimination of unnecessary, overlapping services, the establishment of new programs filling previously unmet needs, and a reduction in CHAMPUS referrals.

The consortium model established at Madigan borrows a great deal from both industry and academia. The clearest example of its long-term, successful operation comes from academia. Large universities have been criticized as impersonal diploma mills whose very size eventually leads to bureaucratic stagnation and increased administrative overhead costs. Small liberal arts colleges on the other hand, have been criticized for not being able to offer large, up-to-date libraries, cultural events, automation, high level faculty, due to extremely limited funding inherent in their small size. The Claremont Colleges in California had successfully adopted the consortium model to deal with the above criticisms.

The Claremont Colleges are composed of seven small schools which retain their own identity (e.g., Pomona College, Scripps) and their dedication to meet individual student needs, yet they pool their resources in specific selected areas to overcome the financial limitations of other small liberal arts colleges. There is one large central library, one health center, one payroll, run by a relatively small, unified administrative section. Decisions affecting the consortium are decided by a Board of Directors composed of the seven College Presidents. The "Chairman of the Board" rotates among the Presidents on a yearly basis, thus eliminating fears of one college gaining at the expense of another. In addition to pooling selected resources for the common good, the consortium model also allows for joint, specialized ventures which none of the colleges, alone, could undertake. For example, instead of all (or none) of the colleges starting a Chinese Studies Center, one of the colleges can specialize in the area with assistance from the others, and make the center available to students from all the colleges. In return, another college may be helped to specialize in a different arena, such as engineering, under the same concept.

The Division of Behavioral Science mirrors the above organization and shows great promise of being a model which could work in other locations. Below are selected accomplishments from six months of operation under the new format with a few additional gains anticipated in the near future.

BEHAVIORAL SCIENCE DIVISION (BSD) ACCOMPLISHMENTS FOR FIRST SIX MONTHS

1. Strategic Planning Retreat.

A senior level retreat was held in February to bring together all senior supervisors within the BSD. The retreat held at the Main NCO Club was to begin breaking down functional barriers that were hampering Divisional progress. Problem solving was done in the traditional TQI format to address the dwindling resources. Minutes were written and handed out to facilitate the implementation of ideas discussed. At the present time, no future meeting has been discussed.

2. Partial Hospitalization Project.

As a result of needs assessment, civilian inpatient substance abuse treatment has been identified as a high cost CHAMPUS expenditure. BSD developed a CHAMPUS Recapture Partial Hospitalization project- the Behavior Health Clinic (BHC) in Clinical Psychology Service. The primary goal of the project is to divert substance abusing beneficiaries from expensive civilian inpatient programs into an equally effective four week partial hospitalization program in BSD. Civilian admissions had been 4-5 per month prior to the initiation of the project at a cost of close to \$700,000 for a six month period. During the first six months of the project, there was only one civilian

hospitalization, saving over \$500,000 after deduction for the cost of the program.

3. Centralized Required Training.

Training has been centralized along a non-partisan level. Each of the six clinics required approximately 20 hours of required training per year. In addition in order to stay current and pass their SDT/CTT test, the enlisted personnel required time set aside to train. This scattered response to training was inefficient and placed great demands upon instructors, both internal and external. By combining training we were able to use less hours not only in class but preparation hours, as well to train the 90+ personnel assigned to BSD. The 91G training has improved due to the great cross section of personnel who can bring their experience to the training. The 91G training has also been expanded to include RCF, 2nd ACR, and Reserve personnel. Plans are under way to include personnel in 62 MED GRP.

4. Centralized Projected Relocation Project.

The current as well as future configuration of the BSD was done as a unified project that looked at functional rather than traditional roles. Hundreds of hours were spent in finding the best configuration possible with the Annex. Criteria were patient care and grouping resources to help one another. This same philosophy has been carried over into the upcoming move, both in the BRAC building and the ANNEX. Services will share space based on the needs of the patient and not on the amount of "turf." The location/ relocation project is discussed on a weekly basis to insure that all services have input.

5. Centralized Computer Allocations for Next Five Years.

The tasking for the newly created IMCG was handled on a centralized basis. This provided not only an upgrade in efficiency but insured that all equipment ordered was compatible. This also allowed resources within the division to be shared. Once the survey was complete, a comprehensive equipment list was drawn up for future reference.

6. System to Assign Enlisted Assets.

Currently assigned enlisted personnel have been removed from the traditional "turf" war and now are seen as a resource belonging to the BSD. In this manner shortfalls and gaps can easily be plugged without tying up valuable time/resources.

Newly assigned 91G personnel are also assigned in this manner and experience levels and training needs can be met in the most efficient manner. Assignments are then made to insure the training is accomplished.

The BSD Board is briefed every Thursday on 91G issues.

7. Single POC for Required Meetings.

The concept of each NCOIC/representative going to the same meeting and reporting back to his/her separate clinic has been abolished. One POC for all major meetings has been assigned and he/she brings back any information and insures that it is put out in a timely manner. Information is disseminated in a clear, concise, and written format with information where to get clarification should the need arise. This policy has lead to 2-4 hours a week per clinic in increased "available patient care time."

8. Forum to Discuss Agency Needs and Reassign Assets to Meet Shortages.

The weekly board meeting for the BSD has created a forum that allows needs/vacancies/shortfalls to be looked at without regard to traditional services boundaries. This has allowed shifting of personnel to meet these needs. Rating chains have remained constant with no shift in TDAs; however, we have shifted resources to increase patient care. Social Work Services (SWS) has supplied one counselor to Community Mental Health (CMHS) to fill the void of experienced leadership, and has designed a system to place an officer asset into the same area to relieve critical supervisory problems. Plans have been developed to shift assets to create a multi-disciplinary team that will be placed in the Department of Pediatrics. This team will actively work with Special Pediatrics.

The BSD has set up a system that will monitor the expenditures of supply dollars to insure that they are spent effectively and that purchases are not duplicated. For example, it would be unwise for two services to buy a piece of equipment that they would only utilize 50% of the time. By creating a central point to oversee, this can be avoided. The central point of contact (POC) does not direct but helps coordinate the supply budget. In addition, this allows the BSD to assess areas that are both over and under funded. At this point, one area has been identified as under funded to meet its mission. The central POC has facilitated the problem solving that is inherent in the supply system. The POC is able to deal with the POC at Logistics to fix supply problems thereby creating an efficient and timely system.

10. Centralized Roster to Share Psychological Autopsies.

Psychological autopsies have been traditionally the mission of CMHS. By regulation, it must be done by a Mental Health Officer. When CMHS became "one- deep" in military officers, it became too large a burden for the Chief to handle and provide quality patient care. The BSD developed a duty roster for all available officers that could provide this service and thereby lessen the burden on the Chief of CMHS. In addition, a second roster was developed on enlisted assets that could assist the

officer designated with collateral interviews and report writing. To accomplish this, a training program was developed to insure that each individual was able to adequately do his/her assigned portion of the psychological autopsy.

11. Central System to Disseminate Information.

The entire BSD administration section is lacking in computerization. Initially one computer was borrowed from within the BSD and designated as the OCIAN contact. By doing this, a central point of contact was developed to bring information to the entire BSD. This, when coupled with the single attendee for important meetings, lead to a newsletter that Chiefs and NCOICs could use to pass information on to the rest of their staffs. Electronic mail was routed through out the BSD and suspenses/requirements were monitored.

This system was also used in reverse when requests for information were needed from multiple sections within the BSD. This information net was used to compile and store information prior to insuring it was sent on to the requesting agency.

12. Medical Library.

BSD centralized requests for mental health books and journals in the Medical Library. Instead of competing with each other for shrinking library resources and consequently giving the perception to others of mental health professionals being at odds, requests are consolidated through BSD and the services lobby for needed resources in a unified manner. Computerized PsychLit has recently been purchased through this unified approach.

13. Internal Credentialing.

BSD developed a joint internal credentialing process and form for non- privileged care providers, such as technicians and assistants. Each service faced the task of developing criteria, forms, and a process of determining and tracking the capabilities on non-privileged providers. BSD simplified the task through a joint and unified approach.

14. Data base for Mental Health Non-availability Statements (NAS) to Track CHAMPUS Expenditures.

The mission of recapturing CHAMPUS dollars is vital to the success of the BSD. To do this, all Form 2161s are cycled through the BSD Chairman and placed in a central data base. From there, they can be monitored by frequency of type and trends.

15. Monitoring of Referrals on a Divisional Level.

With BSD, all referrals for outside services must be routed through the Chairman of the BSD for signature. This allows the BSD to monitor the appropriateness of referral and referral site. This procedure has shown a dramatic decrease in outside referrals in the last year.

BEHAVIORAL SCIENCE DIVISION PROJECTS INITIATED FOR SECOND
SIX MONTHS

1. Centralized Data Base to Track Patient Flow.

It has been a long standing problem in the mental health field that patients will "shop" for services. They will contact various clinics looking for services. This is costly not only in man-hours but supply dollars if testing is done. It is not uncommon in this field that a patient receives intakes at two or three clinics. To alleviate this problem, a combined data base has been developed to be shared by all agencies in the BSD. This can quickly be checked, and contact can be made to ascertain the nature of the visit at the other clinic. In addition, this tracking method allows clinics within the BSD to share information on patients. For example should a client come to SWS and be found not only to be a valid referral but also having had a recent intake at CMHS, this information need not be duplicated. This is a man-hour saving to both the clinician and the patient.

2. Divisional Level QA/TQI Project.

The BSD is developing a combined QA program that will accomplish two missions. The first being to compile all QA data and look at trends/system problem areas and put it in one report to be forwarded to the Command Group. The second mission of this Combined QA group was to look at problems that are BSD wide and use a combined TQI method of finding solutions. The success of this group is evident already when one looks at the successes with Psychological Autopsies and the combined data base. At the present time, the committee has met two times and will continue to develop both its QA plan and problem list.

3. Divisional Level Scope of Care Matrix.

While the BSD is a new and innovative program, its future is still undefined. It will be in a state of change for several years to come. To further define its future mission, it is necessary to define the scope of care on a divisional rather than individual level. To do this, meetings have taken place to define what, how, and when patients access the system, what services they think and actually require, and what treatment is available. By doing this, it will facilitate a coordinated response to patient's needs both now and for several years to come. Assets can be shifted, outdated programs eliminated, and new programs developed to meet the ever changing mission of the BSD. Meetings will continue to define this problem.

4. Uniform Intake Form.

Each service has its own unique Intake Form, leading to repetitious requests on patients to repeat information, and making it more difficult to share data among services. Some portions of the existing Intake Forms clearly overlap in the information requested (although wording and placement of questions differ) while other aspects of Intake are unique to

each service. The overlapping information asked by all services will be incorporated into a uniform Intake Form for all services while the unique aspects will be retained as Addendums, and continued to be used by the applicable service.

5. Focus Groups for Functional Areas.

Present organization does not reflect functional areas of service provided. As examples, pediatric/child services are provided by Pediatric Psychology, Child Guidance (Psychiatry), Discharge Planning (SWS), Family Advocacy (SWS), Developmental Pediatrics, Adolescent Medicine, and Behavior Health Clinic (Drug and Alcohol). This fragmentation is not only inefficient but detracts from continuity of care. Focus groups have been developed so far are in: Pediatric Mental Health, Neuropsychology, Stress Management, Smoking Cessation, and Pain Management.

a. Pediatric Mental Health.

Without shifting TDA positions or changing rating chains, plans have already been finalized to physically locate various child mental health assets in the Department of Pediatrics. Pediatric Psychology, Child Guidance, two to three Social Workers and the Adolescent and Family Specialists for Drug and Alcohol will be co-located with Development Pediatrics and Adolescent Medicine for the majority of their duty day.

b. Neuropsychology.

Neurology in Department of Medicine, Neurosurgery in Department of Surgery, and Neuropsychology in Clinical Psychology have reached a conceptual agreement to establish a Neuroscience Division. Due to space limitations, implementation is postponed until the new hospital addition is completed, but smaller systems improvements have already taken place due to the existence of the focus group.

c. Stress Management.

Stress management groups of various types are offered by Clinical Psychology, Community Mental Health, Social Work, Behavior Health Clinic, Army Community Service (ACS), and Chaplains. The obvious question is whether all are needed for different populations.

The focus group surveyed the various lesson plans and populations served. As a result, the Post Chaplains decided to redirect their efforts in other areas, while the group found that the other interventions were all different enough and directed to different populations to support their continuation. Individuals seeking stress management at various services, however, can be directed to the specific program best suited to their needs. Plans are being developed to formally accomplish the above referral process.

d. Smoking Cessation.

The focus group found that Clinical Psychology and Pulmonary Services offered ongoing interventions, with ADAPCP offering occasional programs, but none had the resources for follow-up. The recommendation of the focus group is to establish a single point of contact at Behavioral Health Clinic who would then direct the patient to the most appropriate group, and would also offer follow-up to individuals in any of the groups after the initial intervention is completed. Implementation has begun and should be completed in 60 days.

e. Pain Management.

Clinical Psychology Biofeedback Program, Anesthesiology Pain Clinic Behavior Health Clinic section dealing with patients addicted to, or abusing prescribed pain medication, Department of Medicine HIV worker, Neurology Service, and Orthopedics have all dealt with pain management issues in various ways. There is no effectively staffed treatment program or coordinated evaluation process available and a CHAMPUS Recapture Project plan is being generated to meet this need.

6. CHAMPUS Recapture Project "Umbrella."

The most likely source of potential staffing and therefore, the most likely avenues of being able to provide needed services, is through the use of CHAMPUS Recapture Projects. The substance abuse partial-hospitalization project in Clinical Psychology is on-going, the Pain Management Project, Adolescent Drug and Alcohol Project, and the Pediatric/Child Project is being written with an Eating Disorder project contemplated. In order to recapture sizable CHAMPUS dollars, the projects need to be very cost efficient. For example, it would be difficult to hire a physician in each of these projects, although each must have medical input. By using the BSD "umbrella," each project can request a part-time physician, and instead of hiring five different part-time physicians, can hire one qualified applicant who would split his/her time among the projects.

COMMENTS: THE "SNOWBALL"

Establishment of any new organizational concept is clearly not an activity which is easily supported by resources at its initiation. The previously outlines six month accomplishments and projected accomplishments were achieved with minimal resources. As an example, Clinical Psychology Service had two Active Duty Psychologists (out of a projected authorization level of seven); one civilian psychologist, two civilian technicians, one receptionist, No NCOIC or 91Gs, and a budget of \$7,000/year. As the projects develop and lead to tangible savings, more resources are allocated. Although starting the snowball rolling is at times difficult, and its roll may never reach avalanche proportions in terms of resources, it does roll and grow. From a staff of six, we are now at 19, and anticipate to be at 23-25

within two months, and we have already spent over \$20,000 for needed supplies.

PATIENT SATISFACTION IN ARMY MEDICAL FACILITIES

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The Health Services Command Patient Satisfaction Survey project was begun in June 1989 with the request to the Group Health Association of America (GHAA) for permission to modify the GHAA Consumer Satisfaction Survey items for use with a military population. The 1989-1990 study (n=2874) resulted in a report on patient attitudes and behaviors in Army medical treatment facilities (Mangelsdorff, 1990). The Commander of HQ, HSC recommended that patient satisfaction surveys of eligible beneficiaries be conducted each year with the results provided to Headquarters, Health Services Command. In 1990, GHAA modified the Consumer Satisfaction Survey instrument. The 1990-1991 study (n=3050) resulted in a summary report on patient attitudes and behaviors in Army medical treatment facilities (Mangelsdorff, 1991).

A tri-service survey working group was formed in 1992 to develop a patient satisfaction survey which would be acceptable to the services and to Assistant Secretary of Defense (Health Affairs). The Army survey developed incorporated items reflecting attitudes toward care received at military treatment facilities, as well as at CHAMPUS, private, and other treatment programs. In addition, attitudes toward the Army Gateway to Care program were assessed.

Items assessing attitudes toward health care received in Army medical treatment facilities were embedded in the Army-wide Survey of Selected Military Personnel (SSMP) administered in Spring, 1992. The SSMP results for Active Duty Army personnel attitudes toward health care are summarized.

The present report documents the 1991-1992 effort and makes comparisons with the SSMP 1992 survey for the Active Duty Army responses.

METHOD

Subjects

In May 1992, Patient Satisfaction Surveys were mailed to 9,400 eligible beneficiaries at 38 Army medical treatment facilities (MTFs). For each of the medical centers, 400 individuals were selected; for the other medical activities, 200 individuals were chosen. Subjects were randomly selected from Defense Eligibility Enrollment Reporting System (DEERS) data lists using zipcodes in the MTF catchment areas. The distribution of subjects from Army, Navy/Marine, and Air Force populations reflected the distribution in the DEERS data lists.

The SSMP was administered in Spring, 1992. The surveys were collected by the Army Personnel Survey Office; data tapes were made available.

Procedure

A survey control number was assigned by Soldier Support Center NCR. Control numbers were used to identify the MTF and the category of beneficiary (active duty, active duty dependent, retired, or retired/deceased dependent); this became the "anticipated" category of beneficiary. Subjects reported their own category of beneficiary; this became the "self reported" category of beneficiary. The lists of eligible beneficiaries were determined from the DEERS patient populations at the selected Army MTFs. Mailing labels were developed from the DEERS lists broken down by zipcode areas around the Army MTFs. Problems with the format of the DEERS lists, missing or incomplete addresses, and coordination with the tri-service survey effort delayed the mailing until May 1992.

The modified GHAA Consumer Satisfaction Survey instrument was adapted for a military population. Survey instruments were sent out from May 1992 through June 1992. As surveys were returned, the contents were edited and comments coded. Items were scored as suggested by GHAA. Content categories were developed using the GHAA criteria. The ten GHAA content categories were access, finances, technical quality, communication, choice and continuity, interpersonal care, outcomes, overall quality, time spent, and general satisfaction.

Items from the SSMP were scored using the same procedures used for the other patient satisfaction surveys. Mean content categories were calculated for each subject.

RESULTS

PSYCHOMETRICS

A series of analyses were conducted to determine the psychometric properties of the items. Separate analyses were conducted for the attitudes toward the military medical treatment facility (MMTF) and for the CHAMPUS, Private, Other facilities (CPO). The analyses included principal components factor analyses of the 35 rated items; the amount of variance accounted for was 68.0% for the MMTF items and 72.1% for the CPO items. The GHAA content categories were subjected to reliability estimates using the Kuder Richardson procedure to calculate coefficient alphas. Reliability estimates were calculated for the item clusters extracted from the factor analysis. Inter-item Pearson product moment correlation coefficients were calculated between selected items. In general, the GHAA content area items had quite acceptable psychometric properties, with coefficient alphas ranging from .844 to .954.

Scoring of Content Categories

The scoring method chosen for each content category was to calculate a mean of all of the items responded to by the subject. Mean content category responses for each respondent were the dependent measures. Tables 1 and 2 summarize mean item responses for the Active Duty Army personnel.

DEMOGRAPHICS

As of 1 September 1992, Patient Satisfaction surveys had been received from 2,317 individuals, with an additional 1,030 surveys returned as undeliverable. The usable return rate was 24.6 % across all categories of beneficiaries. The Active Duty Army sample was 77.8% male, 77.3% Caucasian, 19.8% Afro-American, 7.3% Hispanic, 99.9% High School graduates, and 34.9% officers.

For the SSMP samples, surveys were returned by 5,049 enlisted and 4,528 officers. The enlisted were 88.9% male, 61.9% Caucasian, 33.4% Afro-American, 11.2% Hispanic, 99.4% High School graduates. The officers were 87.5% male, 86.6% Caucasian, 10.4% Afro-American, 5.4% Hispanic, and 99.9% High School graduates.

Category of Beneficiary Users

The distribution of eligible beneficiary categories of the 9,400 sent out was Active Duty (35.4%), Active Duty Dependents (18.5%), Retired (25.9%), and Retired/Deceased Dependents (20.3%). Of the 2,317 respondents analyzed, the proportions as "self reported" by the respondents were Active Duty (21.7%), Active Duty Dependents (11.7%), Retired (41.5%), Retired/Deceased Dependents (25.1%). The "self reported" category of beneficiary was used for all analyses.

Type of Health Care Program Used

Comparisons were made between the types of health care program used. Responses were collapsed as follows: DoD Medical Treatment Facility only (40.0%), CHAMPUS or some combination with CHAMPUS (32.4%), private health insurance (26.6%), and pay self (1.0%). There were significant differences between the types of health care program used; the users of the DoD Medical Treatment Facility were generally satisfied, while the CHAMPUS, Private, and Other users were more satisfied with the care received outside the MTF.

Who Uses the DoD Health System?

At least 80.7% of respondents reported using the MMTF in the last 12 months. The distribution of recent users by category of beneficiary was Active Duty (91.4%), Active Duty Dependents (95.4%), Retired (73.4%), and Retired/Deceased Dependents (75.9%). Only 58.6% of respondents reported receiving care at CHAMPUS, Private, Other facilities.

Of the respondents, 13.6% reported overnight admission for medical care during the last 12 months at the MMTF (n=299). The distribution of inpatient admissions by category of beneficiary was Active Duty (17.2%), Active Duty Dependents (17.2%), Retired (13.1%), and Retired/Deceased Dependents (11.5%). Only 10.0% of respondents reported overnight admission at CHAMPUS, Private, Other facilities.

Outpatient visits for medical care at the MMTF were reported by 77.2% of respondents during the last 12 months (n=1686). The distribution of outpatient visits by category of beneficiary was Active Duty (84.3%), Active Duty Dependents (91.3%), Retired (74.1%), and Retired/Deceased Dependents (79.4%). Only 54.8% of respondents reported ambulatory care visits at CHAMPUS, Private, Other facilities.

Level of Satisfaction: Ratings

The overall level of satisfaction reported was good (mid-point on a 5-point scale). The most positive attitudes towards care provided at the military medical treatment facility were with the areas dealing with finances, technical quality, outcomes, interpersonal care, and overall quality. The lowest ratings were with choice of personal doctor and telephone access to information at the military medical treatment facilities.

The most satisfaction with care provided by CHAMPUS, Private, and Other facilities was with the technical quality, overall quality, outcomes, and interpersonal care. Overall, there was more satisfaction reported with the care received outside the military medical treatment facility.

Why Beneficiaries Do Not Use the MMTF

Eligible beneficiaries did not use the military medical treatment facilities because it was too difficult to get an appointment (22.0%), the services needed were lacking (18.2%), the military facility was too far away (10.9%) or not conveniently located (8.4%), or it took too long to be seen (7.1%).

Comparisons of SSMP and Active Duty Army Beneficiary Responses

In the SSMP samples, officers reported more satisfaction with the health care services than did enlisted. These findings were replicated in the Active Duty Army beneficiary responses. Table 1 depicts individual item and content cluster comparisons across the Army rank groups.

DISCUSSION

The 1991-1992 survey was unique; it allowed beneficiaries to rate care provided at the military medical treatment facility and at CHAMPUS, Private, and Other facilities. The majority of the respondents are using outpatient services at DoD MTFs. Individuals who have used the DoD Health System are generally satisfied with the care provided by the doctors and staff, particularly the interpersonal dynamics (the friendliness, courtesy, respect, reassurance, and support given to the patients). Once the patient got into the military medical treatment facility, the MTF staff was perceived as providing good health care. This has been consistent between the 1989-1990 and 1990-1991 surveys. The problem was obtaining access to the military medical treatment facility or telephone information about specific problems. The retired patients were most satisfied with the care provided, while the Active duty dependents were least. The retired patients were most likely to add comments about their experiences.

In comparing the responses in the SSMP samples, Army officers reported more satisfaction with the health care services than did enlisted; the findings were replicated in the Active Duty beneficiary responses. This has been a consistent finding across a variety of studies that officers are more satisfied.

REFERENCES

Mangelsdorff, A.D. (1990). Patient Satisfaction Survey 1989-1990. Fort Sam Houston, TX: U.S. Army Health Care Studies and Clinical Investigation Activity. (Consultation Report No. 90-003). (DTIC: ADA 230658).

Mangelsdorff, A.D. (1991). Patient Satisfaction Survey 1990-1991. Fort Sam Houston, TX: U.S. Army Health Care Studies and Clinical Investigation Activity. (Consultation Report No. 91-010). (DTIC: ADA 264108).

TABLE 1

COMPARISONS BETWEEN SSMP ACTIVE DUTY BENEFICIARY RESPONSES TO HEALTH CARE ITEMS

ITEM		SSMP		Offcr			
		EM		WO			
		Ovrl	E1-5	E6-9	Ovrl	WO	O1-3 O4-6
Q1A	Overall quality of Army med care	2.94	2.83	3.02	3.22	2.96	3.13 3.46
Q4A	Hours medical facility open	3.17	3.09	3.26	3.31	3.12	3.21 3.53
Q5A	Access to specialty care	2.66	2.69	2.62	2.60	2.34	2.54 2.80
Q6A	Access to hospital care	3.11	3.11	3.10	3.14	2.91	3.10 3.31
Q7A	Access to medical care in an emergency	3.15	3.11	3.19	3.30	3.06	3.22 3.52
Q8A	Medical care appointments by phone	2.59	2.68	2.49	2.43	2.34	2.44 2.45
Q9A	Waiting time in doctor's office	2.26	2.21	2.30	2.41	2.20	2.33 2.61
Q10A	Waiting time between initial call & appt	2.38	2.44	2.31	2.35	2.19	2.32 2.45
Q11A	Availability med info, advice by phone	2.38	2.46	2.29	2.32	2.07	2.34 2.40
Q13A	Services for filling prescriptions	3.23	3.19	3.27	3.31	3.14	3.30 3.39
Q16A	Exam thoroughness, diagnosis accuracy	2.77	2.72	2.82	3.13	2.95	3.04 3.33
Q17A	Doctor's skill, experience, & training	3.03	3.00	3.06	3.33	3.18	3.24 3.52
Q18A	Treatment thoroughness	2.87	2.82	2.92	3.18	3.01	3.09 3.38
Q19A	Explanation of med procedures & tests	2.96	2.93	2.99	3.22	3.02	3.17 3.39
Q20A	Attention given what you say	2.89	2.83	2.95	3.21	3.06	3.13 3.38
Q21A	Advice about staying healthy	3.01	2.97	3.06	3.23	3.06	3.17 3.38
Q23A	Arrangements for choosing personal doctor	2.10	2.14	2.06	2.13	1.88	2.10 2.27
Q25A	Friendliness/courtesy of Dr/med staff	3.08	3.01	3.16	3.31	3.14	3.22 3.50
Q26A	Personal interest in your med problems	2.80	2.72	2.88	3.06	2.87	2.99 3.26
Q27A	Respect given you, attention to privacy	3.11	3.03	3.19	3.33	3.14	3.26 3.53
Q28A	Reassurance/support by Drs and med staff	3.00	2.94	3.07	3.21	3.03	3.15 3.38
Q29A	Friendliness and courtesy of admin staff	2.97	2.94	3.01	2.99	2.82	2.95 3.15
Q30A	Amount of time with Drs and med staff	2.83	2.79	2.88	3.04	2.91	2.95 3.22
Q32A	Overall quality of care and services	2.91	2.89	2.93	3.06	2.83	2.99 3.24

	SSMP		Offcr				Army Active Duty Sample					
	EM		Ovrl	E1-5	E6-9	Ovrl	WO	O1-3	O4-6	Ovrl	E1-5	E6-9 WO O1-3 O4-6
CONTENT CLUSTERS:												
SAT1 Access MTF		2.80	2.81	2.80	2.83	2.63	2.80	2.97		2.94	2.93	2.95 2.86 3.24 3.32
SAT2 Finances MTF										3.41	3.38	3.19 3.10 4.06 3.77
SAT3 Technical quality		2.90	2.86	2.94	3.22	3.05	3.13	3.41		3.06	2.74	2.84 3.03 3.57 3.72
SAT4 Communication MTF		2.96	2.92	3.01	3.23	3.07	3.16	3.40		3.08	2.88	3.00 2.99 3.38 3.69
SAT5 Choice & continuity		2.10	2.14	2.06	2.13	1.88	2.10	2.27		2.06	1.83	1.96 2.11 2.34 2.52
SAT6 Interpersonal care		2.97	2.92	3.03	3.17	2.99	3.10	3.34		3.13	2.88	2.91 2.95 3.31 3.56
SAT7 Outcomes MTF										3.11	2.85	2.85 3.38 3.68 3.66
SAT8 Overall MTF		2.91	2.89	2.93	3.06	2.83	2.99	3.24		3.09	2.75	2.83 2.94 3.46 3.64
SAT9 Timeliness MTF		2.83	2.79	2.88	3.04	2.91	2.95	3.22		2.94	2.77	2.75 2.70 3.28 3.45
SAT10 Gnerl Satisfaction										2.58	2.36	2.41 2.56 2.77 2.83

TABLE 2

PATIENT SATISFACTION SURVEY MEAN LEVELS OF SATISFACTION
TO CONTENT CATEGORIES FOR ACTIVE DUTY ARMY

	MMTF	CPO
ACCESS	2.94	3.35
FINANCES	3.41	2.77
TECHNICAL QUALITY	3.06	3.64
COMMUNICATION	3.08	3.48
CHOICE & CONTINUITY	2.06	3.35
INTERPERSONAL CARE	3.13	3.49
OUTCOMES	3.11	3.61
OVERALL QUALITY	3.09	3.57
TIME SPENT	2.94	3.34
GENERAL SATISFACTION	2.58	2.91

NOTES:

5-point Likert from 1=poor, 2=fair, 3=good, 4=very good,
5=excellent

MMTF = MILITARY MEDICAL TREATMENT FACILITY

CPO = CHAMPUS, PRIVATE, OTHER

U.S. ARMY AEROMEDICAL PSYCHOLOGY TRAINING COURSE

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The Aeromedical Psychology Training Course (APTC) has been developed to provide selected clinical psychologists with specialized training in the fundamentals and application of aeromedical psychology. The APTC was implemented in FY 92 under the sponsorship of the U.S. Army Office of the Surgeon General, and hosted by the U.S. Army School of Aviation Medicine (USASAM), Fort Rucker, Alabama. This paper will discuss the objectives of the course, course curriculum and skills an aeromedically trained psychologist may offer aviation medicine.

Our aircrews operate at the leading edge of human capability, whether engaged in operational exercises or combat. Cognitive and psychomotor skills, decision making, target recognition, sensory perception, and physiological health must remain at continuous optimum levels to avoid unnecessary loss through accidents, environmental threats, or hostile actions. Our advanced aviation technology, equipment and training gives us the advantage of deployability and maneuverability, and reducing the probability of occupational stressors. Still, occupational and domestic stress can have negative effects on mission essential operations. Because our resources are finite and costly, special steps must be taken to avoid unnecessary training and combat losses. Aeromedical psychology, closely related to organization psychology, is critical as a buffer to military aviation stressors. During both peace and war time missions, a variety of stressors exist that are unique to the aviation environment. Because aviation is one of the most stressful occupations, mental readiness is critical in performing multiple complex tasks in the aviation environment. Ample evidence indicates that psychological status plays an overall role in health, aviation safety, and operational readiness in aviation personnel. Such evidence, and the already informal use of psychology in aviation, suggests a growing need for the service of aeromedically trained psychologists. The U.S. Army School of Aviation Medicine and the Office of the Surgeon General developed the Aeromedical Psychology Training Course (APTC) to provide clinical psychologists with specialized training in the applications of psychology in aviation medicine.

The objective of the course is to provide the knowledge and skills which will enable the clinical psychologist to function effectively as a member of the aviation medicine team. Specific course objectives are: 1) "Educate clinical psychologists in the psycho- physiological stresses inherent in Army aviation

operations, missions, and functions." 2) "Educate clinical psychologists in the mission, organization, and psychological readiness requirements of Army aviation." 3) "Train clinical psychologists in the specialized applications of psychological methods and techniques to the aviation population to support the Aviation Medicine Program" (Picano, Bowles, & Edwards, 1993). Equipped with this training, clinical psychologists go into the field to educate and assist aviation operations in a variety of areas.

DEVELOPING AEROMEDICAL PSYCHOLOGY CONSULTANTS

With the increasing sophistication of flight technology and continued complexities of psychosocial factors, the APTC covers a broad range of material examining the psychology-aviation interface. Current graduates of the APTC Course serve as consultants to aviation commanders or management, and aviation medicine personnel to improve safety and enhance performance. For clinical psychologists to act as aeromedical psychology consultants, they are provided with training in: Aeromedical Factors of Flight, Operational Aviation Medicine, and Fundamentals of Aeromedical Psychology. The first week of the APTC Course focuses on the basic concepts of aviation, to include: Aviation Protective Equipment, Altitude Physiology, Basic Aerodynamics, Night Vision Goggles, In-Flight Emergencies, and Flight Regulations. The second two weeks focus on aeromedical psychology courses such as: Stress, Coping and Performance, Behavioral Medicine Intervention, Hypnosis/Enhanced Recall in Accident Investigations, Critical Incident Stress Debriefings, Neuropsychological Issues and Evaluation, Psychological Consultation in Aviation Medicine and Special Operations Overview. Throughout the training, students receive non-crewmember flight experience, flight simulator training, and participate in the APTC clinical practicum. With this training, aeromedical psychologists are able to provide consultation in organizational stress management training, assistance in accident mishap investigations, aviation medical board evaluations, and personal problem management for aviators. Senior aeromedical psychologists may provide quality surveys/research, CRM training, organizational development training, and health promotions.

In summary, the aeromedical psychologist can assist aviation in the following ways: 1) "Providing education and training to aviation personnel on human factors and safety issues related to the psychological status of the individual." 2) "Developing and implementing preventive behavioral medicine programs designed to enhance and preserve wellness." 3) "Providing clinical consultation to commanders (managers), and unit safety officers on psychological and human factors affecting readiness, safety, performance, and retention of aviation personnel." 4) "Providing consultation to accident investigation and flight evaluation boards on individual psychological and human factors

affecting performance and aviation safety." 5) " Providing clinical psychological consultation and support to flight surgeons and commanders (or managers) regarding the assessment, treatment, and psychological disposition of aviation personnel (Picano, Bowles, & Edwards, 1993). Aeromedical psychologists can use consultation skills not only for personal problem management, but also for enhanced performance training.

Equipped with these skills, the aeromedical psychologist serves a special need as a psychologist skilled in the aviation operations. The aeromedical psychologist integrates these unique factors in practice and research to enhance performance and improve safety in the aviation community.

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REFERENCES

Bowles, S.V. (1993). Aeromedical Psychology Training. In R.S. Jensen (Ed.), Proceedings of the Seventh International Symposium on Aviation Psychology, (pp. 682-683), Columbus, OH: Ohio State University Aviation Psychology Laboratory.

Picano, J.J.; Bowles, S.V.; and Edwards, H.F. (1993). U.S. Army Aeromedical Psychology Short Course. In A. D. Mangelsdorff & N. Trent (Ed.), Proceedings of the 1992 Army Medical Department Clinical Psychology Short Course, (pp. 68-75), Augusta, GA. (DTIC: ADA-265598)